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ABSTRACT

The Holmes Group, a consortium of deans and a number of chief academic officers from research institutions in each of the 50 states, is organized around the twin goals of the reform of teacher education and the reform of the teaching profession. Members of the group represent colleges of teacher education that are the leading research institutions in their respective states and regions. The study and consensus-building deliberations of this group over the past several years culminated in the release of this report. Necessary guidelines for the future work of the reform-minded group emerged during this period of intense discussion and consultation. A common agenda, shared understandings, and a broad outline for action commitments have been defined. The shared goals, understanding, and action commitments described in the body of this report will guide the refinement and gradual implementation phase of the consortium, bringing great specificity to the standards development work across the next several years. The stated goals of The Holmes Group are to: (1) make the education of teachers intellectually more solid; (2) recognize differences in teachers' knowledge, skill, and commitment, in their education, certification, and work; (3) create standards of entry to the profession; examinations and educational requirements that are professionally relevant and intellectually defensible; (4) connect the group's institutions with schools; and (5) make schools better places for teachers to work and learn. Appendices include a description of The Holmes Group, lists of participants, and working drafts of goals for The Holmes Group standards. (JD)

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A Report of
The Holmes Group

TOMORROW'S TEACHERS

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Preface

The concern with the quality of education in the United States has extended to the nation's colleges and universities. A growing number of analysts are now urging higher education leaders to get into the thick of reform activities, and many of them are doing so. The Holmes Group began its critical analysis of teacher education in 1983. Assisted by former U. S. Secretary of Education Terrel Bell, several skeptical foundations, and a number of hopeful academic vice-presidents, the education deans forming The Holmes Group began with the modest goal of finding ways they could improve teacher education programs in universities such as their own—that is, those with research productivity as a central responsibility of the institution.

The response to their early meetings was unanticipated. A flurry of concern swirled about their discussions, as if the assembled leaders were plotting revolution. Serious thinking about the problems of teacher education and teaching in their own institutions, quite apart from the structures and strictures of established education groups, was not well received. Apparently, the business of teacher education in America has been a thriving one for higher education, and to even talk about initiatives that might disrupt its continuance, or increase its costs, threatened those profiting from the status quo.

In spite of the controversy, the deans forged ahead. They needed to provide direction in their own institutions and states, for teaching and teacher education remain troubled fields. And the deans needed to clarify their own thinking on such matters, so they could exercise responsible leadership in this period of crisis in American public education. Most of them sensed a genuine obligation to participate in the re-creation of America's schools—so they again become places of pride and a major resource for the development of a literate, productive, and cohesive citizenry.

Originally the deans hoped they would be able to develop new, higher standards for teacher education at their institutions across a fifteen-month period. But as their study and deliberation progressed, the unrealistic nature

of their original time frame became apparent. In retrospect, it is not surprising that they found the problems associated with improving teacher education more complex than expected. But as the complicating issues were revealed, the deans modified their time frame, rather than their resolve. The development of sound examinations to better screen individuals entering teaching would take three to five years; apparently, the development of strong standards to better screen the institutions that prepare teachers would take a comparable amount of time.

While the fifteen-month period of study and deliberation did not produce a set of refined standards, it was productive for the emerging consortium. Necessary guidelines for the future work of the reform-minded group emerged during their time of intense discussion and consultation. A common agenda, shared understandings, and a broad outline for action commitments were identified. Described in the body of this report, the shared goals, understandings, and action commitments will guide the refinement and gradual implementation phase of the consortium, bringing greater specificity to the standards development work across the next several years. Members of the consortium will also participate in the intellectual and political activities required to ensure that future teachers prepared according to the standards have receptive environments in which to work. In time, it is expected that the emerging standards will serve as a basis for accreditation of research universities that prepare Career Professional Teachers.

More than a hundred research universities in the United States have now been invited to participate in further development and study pursuant to The Holmes Group goals and reform activities described in this report. The institutions invited to become charter members of The Holmes Group have several unique features that form the basis of their consortium. They are, while encompassing a fairly wide spectrum of quality themselves, the leading research institutions in their respective states and regions. They are, by any commonly accepted standard, the top 10 percent of American institutions engaged in teacher education, even though in some cases their teacher

education programs are not currently among the nation's best. All the more reason for the consortium which, at its core, is simply a means by which the members can improve and reform their programs. However, the consortium has to be more than a self-help group, because its vision of the kind of professional who should be permitted to teach school in America requires the consortium to work equally hard to change the teaching profession itself. The consortium, by aligning itself with other organizations, agencies, and institutions who support its goals and general directions, wishes to see nothing less than the transformation of teaching from an occupation into a genuine profession.

Thus the consortium is organized around the twin goals of the reform of teacher education and the reform of the teaching profession. It assumes that these reforms will prosper if the nation's best universities are committed to teacher education. It assumes also that teacher education programs will be different in these institutions for all the reasons that make these institutions so academically powerful in every other respect. They are institutions that attract more than their share of the best and the brightest students; they have the faculty who, on the whole, are the nation's best and most authoritative sources of information in their fields; they command substantial resources; and, in the case of education, they are the institutions that have educated and will continue to educate the professoriate in education. If for no other reason than the fact that the teachers of teachers should do their graduate work in institutions that have exemplary teacher education programs, a consortium of institutions that educate teacher educators as well as teachers is needed. This consortium is The Holmes Group.

Judith E. Lanier
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Acknowledgments

The study and consensus-building deliberations of the past several years culminate in the release of this report. As with all projects of such complexity, the efforts have benefited greatly from the invaluable contributions made by others. They deserve our mention as well as our expressions of gratitude.

The Holmes Group efforts have grown from their uncertain beginnings to an organization with broad participation and well-focused goals. Much of this evolution was facilitated by the Johnson Foundation's continued support of the group's deliberations. We offer our special thanks to the foundation's president, William Boyd, and vice-president, Henry Halsted. With the kind and helpful assistance of Kay Mauer, Susan Poulsen Krogh, and other fine staff of the Wingspread Conference Center, our work on these difficult issues was able to be both productive and pleasant.

We are also appreciative of the strong encouragement of former U.S. Secretary of Education Terrel Bell. Although Dr. Bell partially funded the group through the Secretary's Discretionary Fund, his most important contribution was recognizing the importance of our work and urging our leadership in taking an introspective look at teacher education in America. His strong advice to remain steadfast and courageous during periods of doubt was particularly helpful.

We also wish to recognize the support of Edward Meade of the Ford Foundation, and Alden Dunham of the Carnegie Corporation of New York. We thank them for their financial support, genuine interest, and personal involvement in the efforts leading to the formation of The Holmes Group plans. Their commitment to the improvement of schooling in America continues to evidence their own and their foundations' interest in the public good.

We would like to extend our gratitude to Gary H. Dryer, Joanne DiFranco, and Jeanette Minkel. As competent staff at Michigan State University, they gave graciously and generously of their time and talents in the providing of

accounting, secretarial, conference coordination, and manuscript preparation services for the group. MSU designer Lawrence Cole created the cover and coordinated the printing for the report, and Suzanne Ludwig provided final editing services. We thank them for their kind and helpful assistance.

Finally, we must acknowledge the tremendous contribution made by the faculty and administrators of the participating institutions of higher education. The deans, academic vice-presidents, and many others gave generously of their time and energy. Their intellectual and financial resources also contributed in a most significant way in making this effort possible.

A Shared Agenda

America's dissatisfaction with its schools has become chronic and epidemic. Teachers have long been at the center of the debates, and they still are today. Many commentators admit that no simple remedy can correct the problems of public education, yet simple remedies abound. Most are aimed at teachers: Institute merit pay; eliminate teacher education; test teachers to make sure they know eighth grade facts. Paradoxically, teachers are the butt of most criticism, yet singled out as the one best hope for reform.

Teaching must be improved, but plans for improving teaching also must be improved. This report is a contribution to both endeavors. We write as members of The Holmes Group, a consortium of education deans and chief academic officers from the major research universities in each of the fifty states. We came together because we knew that our own schools and universities were not doing well in teacher education, and because we hoped to improve. We have probed the problems and explored remedies. This has never been easy, and often it has been painful. Pursuing the shortcomings of one's own profession, and one's own institutions, is difficult at best.

It has been fruitful, nonetheless. In our nearly two years of work together we have found much to criticize in teacher education. But we have also found ourselves willing to argue for radical improvements that most of us would have dismissed as impractical just a few years ago. We have decided that we must work for the changes that we believe to be right, rather than those that we know can succeed. Much is at stake, for American students' performance will not improve much if the quality of teaching is not much improved. And teaching will not improve much without dramatic improvements in teacher education.

This report outlines our goals for the reform of teacher education. It sketches our plans for reaching those goals. And it explains our reasoning. The report is the result of two years' work, but it is only a beginning. It is a

program for action for our schools and universities, one for which we will work in the years to come.

Our Goals

1. **To make the education of teachers intellectually more solid.** Teachers must have a greater command of academic subjects, and of the skills to teach them. They also need to become more thoughtful students of teaching, and its improvement.

2. **To recognize differences in teachers' knowledge, skill, and commitment, in their education, certification, and work.** If teachers are to become more effective professionals, we must distinguish between novices, competent members of the profession, and high-level professional leaders.

3. **To create standards of entry to the profession—examinations and educational requirements—that are professionally relevant and intellectually defensible.** America cannot afford any more teachers who fail a twelfth grade competency test. Neither can we afford to let people into teaching just because they have passed such simple, and often simpleminded exams.

4. **To connect our own institutions to schools.** If university faculties are to become more expert educators of teachers, they must make better use of expert teachers in the education of other teachers, and in research on teaching. In addition, schools must become places where both teachers and university faculty can systematically inquire into practice and improve it.

5. **To make schools better places for teachers to work, and to learn.** This will require less bureaucracy, more professional autonomy, and more leadership for teachers. But schools where teachers can learn from each other, and from other professionals, will be schools where good teachers will want to work. They also will be schools in which students will learn more.

We note that these goals have large implications beyond our own schools and departments of education. They reach into other parts of our universities, where most prospective teachers get most of their higher education.

Our own professional schools are part of the problem. But what of the many badly taught and often mindlessly required courses that our students, like all undergraduates, must take in the various departments of arts, sciences, and humanities? Is the weak pedagogy, the preoccupation with "covering the material," the proliferation of multiple-choice tests, and the delegation of much teaching to graduate students—increasingly, students who cannot speak English very well—not full of messages about the nature of knowledge and standards for acceptable teaching? Can we expect many good teachers to come from universities that teach their undergraduates in these ways? These problems are as real as those in our own schools and departments, and as influential for schoolteaching. We are pressing ahead with our own faculties, and will continue. American colleges and universities must get to work on these larger problems of teacher education. Preliminary conversations with top officials of our universities have turned up encouraging evidence of their wish to attack these difficult problems.

Our goals also lead us out, from the universities in which intending teachers study, to the schools in which they must practice. We have become convinced that university officials and professors must join with schools, and with the teacher organizations and state and local school governments that shape the schools, to change the teaching profession. Schools no less than universities are places in which teachers learn. Unfortunately that learning typically has been lonely, and catch-as-catch-can. It has been more a matter of daily survival in a difficult job than progress toward professional improvement. America's children need schools in which teachers can learn, in which teachers can thoughtfully investigate and improve professional practice. For schools in which most teachers can barely learn enough to survive are schools in which most students will do no better. Together with other educators we have much to do, to make schools better places for teachers and students.

An Agenda for Improving a Profession

Professional education prepares people for practical assignments: to teach, to heal, to design buildings, or to manage organizations. One therefore cannot consider teacher education apart from the practical assignments that we call teaching, any more than one could consider medical education apart from the practice of medicine. Unhappily, teaching and teacher education have a long history of mutual impairment. Teacher education long has been intellectually weak; this further eroded the prestige of an already poorly esteemed profession, and it encouraged many inadequately prepared people to enter teaching. But teaching long has been an underpaid and overworked occupation, making it difficult for universities to recruit good students to teacher education or to take it as seriously as they have taken education for more prestigious professions. Teaching, after all, comes with large responsibilities but modest material rewards. Good teachers must be knowledgeable, but they have few opportunities to use that knowledge to improve their profession, or to help their colleagues improve. And, despite their considerable skill and knowledge, good teachers have few opportunities to advance within their profession.

As we try to improve teaching and teacher education, then, we cannot avoid trying to improve the profession in which teachers will practice. Here we find a curious situation. While the intellectual and social demands on teachers have escalated at an astonishing rate since this century began, the nature and organization of teachers' work have changed only a little since the middle of the nineteenth century. We now live in an age when many elementary school students have their own microcomputers. These students can put some of the most amazing achievements of modern science and technology to work in support of their learning. Yet their teachers are still working with the same job descriptions that teachers had in the mid-1800s, when McGuffey's Reader and spelling slates were the leading educational technology.

It is a painful contrast, one that embarrasses us as educators and as Americans. Consider these points. Many teachers still instruct whole classes of students in all subjects, as there is little or no academic specialization until high school. They still teach classes all day long, with little or no time for preparation, analysis, or evaluation of their work. They still spend all of their professional time alone with students, leaving little or no time for work with other adult professionals to improve their knowledge and skills. Nor are they thought worthy of such endeavors or capable of developing the requisite expertise. But teachers have a lengthening list of responsibilities. They must teach children with many special needs and disabilities—children who were rarely in school until recently. They must supervise extensive testing and evaluation programs for their students, and try to make sense of the results. They must cope with a variety of state and federal programs and requirements and mandates. The list goes on.

The schoolteacher's job description, then, is one that none of our universities would ever visit on a member of their faculties. For they know that teachers who work under such conditions have no time left to learn themselves, to be productive scholars, or even to do justice to their students' homework. Yet, nearly all schoolteachers hold such creaky old jobs—even now, in the slick, high-tech years of the late twentieth century. The past century has seen the most amazing explosion of knowledge in human history. Science has revolutionized our understanding of nature several times over in eight decades, and no end is in sight. The social sciences have been invented and prospered, and the humanities have been enriched, expanded, and radically revised. All of this has greatly enriched and complicated our understanding of the world and of human society. Yet the jobs we assign to teachers have remained very nearly the same as they were before these great intellectual revolutions began. What is teaching if it is not bringing students into that new world of the mind? But how can teachers do such work well, when they must do it with a job that was designed for a society in which most Americans could barely read, in

which books besides the Bible were rare, and in which teachers were paid in pumpkins and firewood?

If someone argued that doctors should practice modern medicine within the terms of an 1850s job description—evangelizing patients from a horse or wagon, working for low pay, wandering the countryside in search of work, and requiring no more education than one's patients—he would be ridiculed by any audience. Yet most Americans think nothing of requiring teachers to carry out a late twentieth century assignment while locked into a mid-nineteenth century job description. Nor does it strike them as odd to then blame teachers for a job badly done.

It seems indisputable that teachers' assignments must be changed. The best education will be no antidote to demeaning jobs that make little room for what has been learned, that offer few incentives for learning more, and that are swamped with clerical and other responsibilities. The first requirement is jobs that will challenge and reward the best minds now in teaching, and that will attract others just as good. Above all else, teaching must make room for top practitioners who can lead their field to improvement. This means jobs in which fine teachers can use their pedagogical expertise to improve other teachers' work, as well as to help children. It means jobs in which teachers can become experts in a specialized area, such as curriculum development, teacher evaluation, or school management. It means jobs in which real leaders can exercise the responsibilities and reap the rewards of serious professionalism. We call these people *Career Professionals*. They would be people at the top of their field, who have proven their excellence in teaching, in their own education, and in examinations. They would play a role in education not unlike that of clinical professors in medicine.

But such a cadre could only be small—we estimate roughly one-fifth of all teachers. A majority of the teaching force should be *Professional Teachers*: people who have proven their competence at work, in rigorous professional qualification examinations, and in their own education. Their jobs would differ from those of today's teachers in their more serious educational requirements,

and in the stiff standards for entry to and continuance in teaching. These would be jobs to which only bright, highly qualified people could gain entry. They also would be jobs in which teachers could continue to learn and improve—among other ways, through their work with one another and with Career Professionals. They would be jobs that could lead to a Career Professional position, if the incumbent were sufficiently gifted and willing to invest the time in advanced study and examinations.

Finally, many teachers would be novices. We call these novices *Instructors*. They would be beginning teachers, whose job would last only a few years. The entrance requirements would be flexible. Bright college graduates with a solid academic background in one or two subjects, and who could pass an entrance exam, would be welcome. So would be adults from other professions, who wanted to try out teaching, and whose knowledge of an academic field made them a safe bet to assume limited instructional responsibility. Work as Instructors would offer many talented people an opportunity for service and for learning, and it would give them a chance to explore a job about which they were uncertain. It also would enable American schools to absorb enrollment swings without the mindless responses—first hiring thousands of unqualified warm bodies, and then riffing thousands of capable teachers—that have marked the last three decades of educational history. Instructors would be qualified to teach, but their work would be supported and supervised by Career Professionals.

This array of teaching assignments would make room only for well-educated teachers. But it would recognize differences in competence, commitment, and responsibility among these teachers. It would create room for professional improvement and advancement within teaching, but it would tie these opportunities to professional expertise and commitment. This array of jobs would therefore create incentives for a constructive professionalism: for learning, for serious inquiry, and for helping others to improve.

One way to think about these jobs, then, is as a way to improve the teaching profession. But we are educators

and teacher educators. As we think about preparing people for such jobs we see the need for basic changes in teacher education. Certainly the present arrangements for educating teachers would not produce many qualified applicants. We therefore sketch below our view of the changes we must make, if our schools and departments are to produce people worthy of such assignments as we have just described. This sketch reflects our agenda for work in the coming years.

We are also university officials who work within state requirements for teacher licensing, and whose academic curricula increasingly have been driven by those requirements. The job structure just outlined implies some major changes in the criteria for teacher certification and in the university's role in that certification. We sketch these changes first.

Changes Required in Teacher Licensing

The changes we propose would establish a three-tier system of teacher licensing. Two of these certificates—Professional Teacher and Career Professional—would be renewable and could carry tenure. The other—Instructor—would be temporary and nonrenewable. Each certificate would depend upon entrance exams and educational accomplishments. The two professional certificates also would require assessment of performance on the job.

Instructor. No professional certificate should be available to a teacher who has only an undergraduate degree. The license open to Instructors must therefore be temporary. These certificates should be nonrenewable, and good for no more than five years. We call these people Instructors to emphasize our belief that they should not be confused with the nation's corps of professional teachers. Since teachers should offer instruction only in the academic subjects that they know well, Instructors should be licensed only in those subjects in which they have an undergraduate major or minor. In addition, no teacher should be allowed to practice as an independent professional without at least a year of carefully supervised practice, and advanced study in pedagogy and

human learning. Since beginning Instructors will have met neither of these requirements, they should be licensed to practice only under the direct supervision of a fully certified professional. These temporary certificates also would require an intensive professional development course (several months of full-time study) before candidates would be admitted to practice.

Taking and even passing college and university courses is no guarantee that the material has been learned. Thus, all Instructors should also pass a written test in each subject they will teach, prior to certification. This exam should test for their understanding of the basic structure of the discipline, and tenets of a broad liberal education. They should additionally pass a general test of their reading and writing ability, and a test of the rudiments of pedagogy. These tests would assess reasoning as well as specialized knowledge, general information, and memory. They should be sufficiently difficult so that many college graduates could not pass.

Professional Teacher. This would be the first full professional certificate. It would be granted only to teachers who had completed a master's degree in teaching. This degree would include continued study in the candidate's major or minor academic field, studies of pedagogy and human learning, work in classrooms with children who were at risk, and a full year of supervised teaching.

Professional Teachers would have to pass the same examinations in the subjects they would teach as would Instructors, and they would have to pass the same general reading and writing exams as well. If they wished to add a new major or minor field since qualifying as an Instructor, exams for them also would have to be passed prior to certification. And they would have to pass examinations in pedagogy and human learning similar to those taken in their subject fields.

But one cannot learn to practice in any profession without extensive practical experience. There is ample evidence that if intending teachers do not have carefully supervised and extensive practical experience at the

beginning of their careers, most will not learn to teach well. They may learn how to keep their classes quiet and their students buried in workbooks, but they will not learn how to help them to think, to press ahead on their own, and to care for learning. Thus, no professional certificate should be granted unless the candidates have met several additional requirements.

First, they should prove their competence as practitioners. Standardized tests cannot cover this entire task. They are suited to assessing how good a student of teaching one is—just as they can assess how good a student of law, history, or physics one is. But candidates' performance on such tests are very poor predictors of their capacity to teach these things well. One cannot be a good teacher of a subject unless one is a good student of that subject; teaching cannot be content-free. But to be a good teacher, it is not enough to know a subject well as a student. One must know its pedagogy. One must know it as a teacher, and not just as a student. This is analogous to the difference, in medicine, between being a good student of anatomy and physiology on the one hand, and knowing how to perform surgery on the other. The analytic knowledge of the subject is a necessary element in good surgery, but it is hardly the same thing as surgical skill.

In order to qualify as a Professional Teacher, then, candidates also should be able to demonstrate competence as teachers of academic subjects. This means practical and varied demonstrations of professional skills and knowledge. They could include carefully assembled portfolios of teaching and/or studies of one's own practice, planned exhibitions of one's teaching, and unannounced observations of the candidate's classroom performance. Whatever the form of these demonstrations, they should afford a balanced, rigorous scrutiny of candidates' practice with a variety of learning groups.

Career Professional. This would be the highest license in teaching. It would be granted to Professional Teachers whose continued study and professional accomplishments revealed outstanding achievements as teachers, and promise as teacher educators and analysts of teaching.

A first requirement would of course be satisfactory completion of all the requirements for the Professional Teacher license. A second requirement would be extensive experience as a Professional Teacher, with outstanding performance.

The third requirement for this license would be further specialized study, ordinarily for the doctorate either in an academic subject or in some other specialty. For instance, many Career Professionals would take a major role in the supervision and education of practicing teachers; they might, therefore, choose to concentrate their academic studies in teacher education. Others might serve as head teachers, and specialize in instructional management. Still other Career Professionals might focus their academic studies on the assessment of student learning or in advanced study of subject matter pedagogy.

The typical way to satisfy these requirements for specialization would be a combination of successful doctoral study and demonstrations of practical competence. Thus, a candidate might present a completed doctorate in teacher education, including extensive clinical research on teachers' learning, or on alternative approaches to improving pedagogy in a subject, or some related matter. The candidate also would present evidence from practice about competence in this specialty. As noted above, these practice exams would include oral exams on teacher education, unplanned observations of work as teacher educators, a portfolio of evidence from the study of the candidate's own practice, among other things.

But candidates for the Career Professional license might well complete these requirements for advanced study and outstanding professional practice without the doctorate. In some cases an academic thesis might be an inappropriate vehicle, and in others the candidate's field might be covered as well in clinical as in university classroom study. Candidacy for this license should therefore be open to practitioners who can demonstrate high achievement in both the study of practice and practice itself, whether or not they have the doctorate.

• • •

These paragraphs only sketch our view of the teacher licensing requirements that should be adopted, and quickly summarize the arguments for these standards. Much remains to be done before such certification standards could be put into effect. New standardized examinations in reading, writing, academic subjects, pedagogy, and the foundations of education would have to be devised and field-tested. New forms of examination for professional competence also would have to be devised and tested, so that practitioners could be certified on the basis of proven professional competence rather than competence as a student of a subject. Both of these are large assignments, the second more than the first. One of our highest priorities will be working with others in education, and with specialists in tests and professional assessment, so that we can have such examinations ready to use in five years. They will not be perfect. But we are confident that a balanced portfolio of assessment approaches can be devised, one that will allow us to discriminate those who know a subject well from those who do not, and that will allow us to discriminate those who know how to teach that subject from those who merely know it as a student.

These teacher licensing standards also imply a great deal of work for our own education schools and departments, and for our universities. We turn to those matters now.

Changes Required in Universities and Schools

Here we discuss dramatic changes in education as a field of study. We outline revisions in both the undergraduate and graduate curriculum, parallel changes in the study of pedagogy and allied fields, and the new relationships between universities and schools that will be required to support these changes.

First, the undergraduate education major must be abolished in our universities. For elementary teachers, this degree has too often become a substitute for learning any academic subject deeply enough to teach it well. These teachers are certified to teach all things to all children. But few of them know much about anything, because they are required to know a little of everything.

No wonder so many pupils arrive in high school so weak in so many subjects.

We emphasize that no teachers, even the temporary Instructors, should be allowed to teach subjects they have not studied deeply. Professionally certified teachers should teach only subjects they both know well and can teach well. Eliminating the undergraduate education major is therefore only a beginning toward improving the quality of teacher education.

How can we say this, when so many reformers argue that we need only eliminate education courses to solve the problems of poor teaching?

Our answer is simple. America already has experimented with this unfortunate idea. Most of our universities have long since eliminated most education requirements for secondary school teachers, to provide more subject matter specialization. Many universities never had serious requirements. Intending high school teachers in our universities thus take only two or three education courses. This has long been the rule.

How has this approach worked?

Not well. The last five years of reports on high schools present a dismal account of high school teaching. Most of it is dreary. Teaching consists chiefly of either dull lectures or fact-oriented workbook assignments. Most teachers exhibit no deep grasp of their subjects, nor any passion for them. Their pedagogy is as sadly lacking as their grip on the material. But these problems with their performance as teachers cannot be chalked up to weak course work in education, or insufficient course work in the subjects that they teach. These teachers had the same course work in the subjects they teach as other undergraduate majors. They had the university education that many reforms hold out as the alternative to teacher education.

What explains this result?

Part of the answer probably lies in the ways these teachers were taught in school, which seems to have been similarly dreary. But another part lies in our own

universities. They strive to hire highly qualified academic specialists, who know their subjects well and do distinguished research. But few of these specialists know how to teach well, and many seem not to care. The undergraduate education that intending teachers—and everyone else—receives is full of the same bad teaching that litters American high schools.

To eliminate the undergraduate education major would remedy none of this. In fact, it would probably worsen things. For most of the education majors in our universities are in elementary teaching, and most observers argue that pedagogy in elementary schools is better—more lively, imaginative, and considerate of students—than in high schools. Cutting out the courses that help to produce such teaching would do little good, and the evidence from high schools suggests that it might well do some evil.

But we do not argue for retaining undergraduate education majors. We argue instead that eliminating those majors without dramatically improving the academic subjects that undergraduates learn would be a sad error. To cut down on courses in pedagogy for intending schoolteachers without improving pedagogy in the universities would make a horrible joke of educational reform.

Instead, we urge that our universities take three steps to strengthen education in academic subjects, as accompaniments to the elimination of undergraduate education majors. One is to sharply revise the undergraduate curriculum, so that future teachers can study the subjects they will teach with instructors who model fine teaching and who understand the pedagogy of their material. A second step is to organize academic course requirements and courses so that undergraduate students can gain a sense of the intellectual structure and boundaries of their disciplines, rather than taking a series of disjointed, prematurely specialized fragments.

Our point is simple. If teachers are to know a subject so that they can teach it well, they need to be taught it well. Few of us are Leonardo. To become good teachers, most

undergraduates need both good pedagogy and courses that help them to learn the structure of the subjects they will teach. Neither is common today.

The third major change must be in schools and departments of education. Instead of our present sprawling and often scattered courses of study, we need to devise coherent programs that will support the advanced studies in pedagogy required for solid professional education. The certification requirements outlined earlier imply sharply revised programs of research and study, leading to master's and doctoral degrees in teaching and allied fields. Elements for this work exist in nearly all of our universities, but nowhere have these elements been pulled together, and given the sense of purpose and support they require.

What would these new pedagogical studies look like?

We have no blueprint. Answering this question is a large part of our work in the next five years. We have explored the feasibility of our plan, and are convinced that it can be done. No two universities will have identical programs, but we can provide some sense of their outlines.

One important and large line of work must focus on the pedagogy of specific subjects. Generic undergraduate "methods" courses must be replaced with subject matter-oriented studies of teaching and learning. This work should be based on the best understanding—from academic research and clinical studies of practice—of good teaching and learning in specific subjects. Such studies can build on recent research on human cognition, on older lines of research in subject matter-specific teaching and learning, and on recent research on teaching.

A second important line of work should focus on teachers' learning. Here we must bring to the study of teachers' acquisition of skill and knowledge the intelligence that social scientists and practitioners have applied to the study of children's learning. There is more to be done here than in the study of pedagogy, for

research on teachers' learning is still weakly developed. But some solid beginnings have been made. Improved research and practice will be essential for the improvements in teacher education that we want to promote in schools and in universities.

Additional work should be focused on the specialties mentioned above: the assessment of professional performance, and the evaluation of instruction chief among them.

These changes would require that the top officials of our universities lead the efforts for change. Many faculty members and administrators would have to work hard for years, to devise and implement major revisions in university curriculum and instruction. The changes also would require unprecedented cooperation across departmental and disciplinary lines, within universities. For example, changing the undergraduate curriculum as outlined above would require cooperative work among faculty members from the humanities, sciences, social sciences, and education. Faculty from these diverse realms, who rarely work together now, would have to work closely to change the structure of the curriculum, and to sharply improve the quality of teaching. Such work would not be easy.

Cooperation would also be required to reorient courses in pedagogy so that they build on a sophisticated understanding of both the subject in question and of pedagogy for that subject. Some scholars in the humanities, sciences, and social sciences have investigated these matters, as have others in education schools. But their work—while absolutely central to improving teaching and learning, in schools or in higher education—is fragmented and little esteemed in universities. If substantial change in teaching and learning is to occur, whether in schools or universities, scholars of this sort should be brought together. Their efforts should be focused on the improvement of instruction in academic subjects, and they should be supported heavily enough by their universities to recruit other good minds. If successful, their work should be central to revisions in

the undergraduate curriculum, and to the development of advanced studies in pedagogy.

Finally, along with all of these changes, our schools and universities must open up new connections with schools. One connection would be to bring expert teachers into universities, as more important and more responsible participants in professional education. Good teachers have long been crucial in this respect, in their work with student teachers. But university students in the new advanced programs sketched earlier will have much to learn from the top people in teaching, about pedagogy and student learning. Conversely, university faculty who are competent to teach either teachers or pupils should spend more time doing these things and studying them in schools. Such work could help to improve our understanding of instruction, and to sharpen teachers' knowledge and skills. It also would help to turn schools into places in which teachers' learning, and research on teaching and learning, are more common.

Changes of this sort are easier to describe than to carry off. Bringing expert teachers into universities will require forging new arrangements with schools, to redefine those teachers' jobs. It also may require new arrangements within the universities; for example, the ordinary criteria for university appointments do not include distinction in practice. Sending more university faculty into the schools will be no less difficult. There are few rewards for such work in the incentive structure of research universities. There are no titles, job descriptions—or even places to sit in schools—for such emissaries from higher education. And there are few precedents for managing the complex jobs that swim in the limbo between agencies.

Conclusion

Our universities must respond to the crisis in public education. As the educators of most teachers and administrators in public schools, we have some responsibility for conditions in them. We have outlined a program of action aimed at dramatically improving the quality of America's teachers and at improving the teaching profession. We have committed ourselves to

work for these improvements—in both undergraduate education and in graduate professional education—in our universities. Without the sorts of change outlined here, the quality of teaching and learning in the public schools cannot improve.

But we do not argue for these changes only because of past evils. The program outlined above draws on the unique strengths of the research universities. It requires extensive research and development aimed at much-improved instruction for undergraduates. It requires a program of development and field trials of new approaches to the assessment of professional competence. It requires stepped-up research on teaching and learning academic subjects. And it requires the sort of cooperation across academic boundaries that happens easily in great universities when the problems are taken seriously enough.

The work that we propose is therefore distinctively the province of the university: study, research, and teaching. What is new in our proposals is the idea that these distinctive academic resources be focused on the problems of teacher education, and that the universities make the solution of these problems a top priority.

In a sense, then, our proposal is hardly radical. For American universities know quite well how to provide outstanding professional education. The best professional education in medicine, public affairs, business, and law, that can be found in the world is found here in the United States. There is no doubt that our universities can do an equally outstanding job for teachers. The only question is whether they will.

A Common Understanding of the Obstacles

The breadth of The Holmes Group agenda testifies to the problems and the complexities of the undertaking. We cannot improve the quality of education in our schools without improving the quality of the teachers in them. Curriculum plans, instructional materials, elegant classrooms, and even sensitive and intelligent administrators cannot overcome the negative effects of weak teaching, or match the positive effects of competent teaching. Although leadership, resources, and working conditions in schools influence those who enter and choose to remain in the classroom, they do not affect students' learning as directly as do teachers. The entire formal and informal curriculum of the school is filtered through the minds and hearts of classroom teachers, making the quality of school learning dependent on the quality of teachers.

The quality of teachers will not be improved unless we improve the quality of their education—and we cannot accomplish this task without changing the universities, the credentialing systems, and the schools themselves. The functions of these institutions cannot be regarded as independent of one another. As difficult as it may be, any promising reform agenda must address the interdependence of institutional functions and responsibilities. The rewards and career opportunities for teachers; the standards, nature, and substance of professional education; the quality and coherence of the liberal arts and subject matter fields; and the professional certification and licensing apparatus must all be changed together, in a mutually compatible fashion.

Serious and effective reform of teacher education is not a parochial concern for one segment of the education community. It is central to the broader reform of

education, and the support of the larger community is essential to its success. The support of the constituencies that represent this larger community must be based on an understanding of the underlying problems that shape the quality and composition of the teaching force. This understanding is necessary if we are to resist the temptations to adopt superficial and symbolic reforms that will not build and reward competence but actually could worsen the problems they were meant to solve.

This section of The Holmes Group report attempts to build that understanding by illuminating the fundamental problems we have wrestled with over the past several years. Its purpose is to expose the larger educational and policy communities to our distinctive view of the obstacles to reforming teaching and learning in our schools. We hope that the lessons that we have painfully learned about existing inadequate approaches to educating teachers and improving teaching will strengthen the understanding and conviction of others to assist with the reform efforts we propose.

Overly Simple Solutions

Henry W. Holmes, dean of the Harvard Graduate School of Education in the 1920s, argued persuasively that "the training of teachers is a highly significant part of the making of the nation." Claiming that "a more serious conception of the place of the teacher in the life of the nation is both necessary and timely," Holmes urged educational and political leaders to join him in changing the systems supporting poorly trained, paid, and esteemed teachers. He pleaded with his colleagues in schools of education to prepare teachers who had "the power of critical analysis in a mind broadly and deeply informed." But he found few supporters, and while he constructed a strong program at Harvard, it was short-lived. Like a number of educational leaders before and since, Henry Holmes failed in his efforts to make schoolteaching and teacher education more professional.

Half a century later, why should another set of deans resurrect these same arguments, call for similar reforms,

and then expect a more positive outcome? The hope, we believe, lies in our better understanding of the obstacles that blocked earlier reform efforts, and in our reform plans themselves, which are grounded in principles of effective institutional change. It is buoyed by the social circumstances that now make educational change a prominent, critical issue. This optimism, however, is countered by a deep concern that the nation will again opt for the traditionally simple solutions that have consistently failed. These failures will be repeated unless we learn from past reform efforts.

The legendary problems of teacher education in America have been lamented since the turn of the century. A rediscovery of the problems and a condemnation of the factors thought to cause the problems recurs each decade, accompanied by a new exhortative report. With a remarkable sameness, these reports have admonished teacher educators for not recruiting better students and imposing higher selection and screening standards. Only the best and brightest should be entitled to teach, and the brightest should be better prepared by taking more subject matter courses—so long as they are offered outside of schools of education. Except for expanded practical study in the schools, the reports call for fewer education courses. With great consistency, the problem has been conceived as the wrong persons, studying the wrong things, in the wrong places.

Traditionally such logic has led to a simple and straightforward reform platform. Prospective teachers should be brighter and more accomplished, studying subjects rather than pedagogy, spending less time in the halls of ivy and more time in the schools. College degrees and professional teaching licenses should be awarded on the basis of performance and standardized tests of teaching and subject matter competence. For a number of very good reasons, this perennial, basically simple and appealing agenda has gone nowhere.

The Holmes Group has identified two fundamental weaknesses in these familiar recommendations. The first is a simplistic view of the nature of the problems confronting education—a failure to appreciate the extent

to which teacher education has evolved as a creature of teaching. The second is a simplistic view of how one goes about solving the complex problems of education. Would-be reformers have attempted to impose solutions, assuming that their ideas could be readily accepted and implemented without the active involvement of practitioners. We can no longer perpetuate such major oversights.

Plans to improve teacher education must be inextricably tied to plans to improve the occupation of teaching. They must be devised and tested by the school and university teachers and administrators who will be expected to carry them out. The reward structure, career patterns, working conditions, and nature of professional responsibilities in teaching will continue to influence the structure, standards, and substance of teacher education. The Holmes Group, consisting of leaders from teacher education itself, is aware of the impossibility of reforming professional schools for teachers apart from changing the structure of teaching and the career opportunities and rewards available in the K-12 schools. We acknowledge that reforming professional teacher preparation requires the full participation of practicing teachers and teacher educators. Recent scholarship in implementation demonstrates the essential role that teachers themselves play in the reform process and how critical it is to avoid assuming that initiatives imposed from above will have any predictable or desirable effects on teaching and learning.

To avoid the problems and frustrations that accompanied efforts to act on the earlier critiques of teacher education, The Holmes Group leadership endorses a reform agenda consisting of several distinctive but essentially interdependent parts. Necessarily complicating the reform agenda, our plans far exceed the simple solutions proposed in the past. In order to improve teachers' professional opportunities and teacher education, the structure of the traditional careers in teaching needs to be changed. Differences in teaching responsibilities, in turn, require substantial changes in the structure, standards, and substance of teacher education. Further, new

partnerships between the schools and institutions of professional education are necessary. It is also imperative that the nature of liberal arts instruction be modified to strengthen the substance and coherence of the disciplinary backgrounds of prospective teachers. If the status quo is to change, we must reckon with these complexities.

Naive Views of Teaching

If teaching is conceived as highly simple work, then any modestly educated person with average abilities can do it. But if teaching is conceived as a responsible and complex activity that is clearly related to both group learning and individual learner success—including those children for whom learning is not easy and for whom lots of help at home is unavailable—then teaching requires special selection and preparation. The case can be made, in fact, that the nation's troubles with student learning in schools are closely tied to popular and excessively simple conceptions of teaching. The three most common views that characterize the insufficient "bright person" models of teaching must be understood.

One-way teaching. One simplistic version equates teaching with "presenting" or "passing on" a substantive body of knowledge. Another includes "presenting and keeping order," and a third elaborates these views slightly to include "planning, presenting, and keeping order." Such views assume that bright, well-educated individuals can draw on their accumulated knowledge to develop coherent, logical presentations which can be delivered and hence learned by students in orderly classrooms. A critical aspect of such models is their tendency to assume that whether or not learning takes place in any particular class is primarily an outgrowth of the students who happen to be there. The teacher's responsibility is only to develop and deliver lessons in some reasonable fashion; the onus for learning rests with the students. The characteristics of the student group and the individuals in it thus influence the lesson and mode of delivery only modestly. The teachers' responsibility basically ends

when they have told students what they must remember to know and do.

The simplistic nature of these views of teaching and learning becomes readily apparent when one considers that well-educated persons could *obviously* produce an adequate presentation on some aspect of their acquired knowledge. Virtually all of them should be able to prepare a lesson which would be appropriate, maybe even outstanding, for at least some classroom of students, at some level of our educational system, somewhere in the United States. This conception blithely overlooks one of the most critical aspects of quality teaching—the extent to which the lesson is appropriate for the particular students for whom the teacher is responsible and for whom the lessons should be crafted.

Unfortunately, simple models of teaching are often most attractive to bright, studious individuals who took major responsibility for their own learning as students—once they were pointed in the general direction by a "presenting" teacher. Reasoning that it worked for them and will for others, some intellectually able teachers give only passing attention to learners and learning, insisting that to do otherwise would constitute "spoon-feeding." Viewed in this simple lesson delivery fashion, teaching is something any intelligent person can do. This belief can ignore professional knowledge because it is easy for teachers' lessons to have quality if they are independent of student learning. The Holmes Group rejects such simple views. It subscribes instead to a conception of fully competent professional teachers.

Interactive teaching as the hallmark of competent professionals. The Holmes Group's vision of teaching is born of both time-tested conceptions of teacher qualities and responsibilities, and of recent understandings about role requirements. Central to the vision are competent teachers empowered to make principled judgments and decisions on their students' behalf. They possess broad and deep understanding of children, the subjects they teach, the nature of learning and schooling, and the world around them. They exemplify the critical thinking they strive to develop in students, combining tough-

minded instruction with a penchant for inquiry. Students admire and remember them many years after leaving school, since such competence and dedication in teaching is unfortunately not as common as it should be.

Competent teachers are careful not to bore, confuse, or demean students, pushing them instead to interact with important knowledge and skill. Such teachers interpret the understandings students bring to and develop during lessons; they identify students' misconceptions, and question their surface responses that mask true learning.

Competent teachers have knowledge, skill, and professional commitments that avoid the problems of the "bright person" versions of the teaching-learning process. The professional knowledge these teachers possess goes beyond a strong liberal education. It is not merely common sense, nor is it learned only through trial-and-error teaching or the experience of being a student. Rather, it includes academic and clinical learning that prepares one to manage both mastery of content and the complex social relations of the classroom in a way that fosters student learning as well as an attachment to learning. As professionals, these competent teachers would never breeze into a classroom, present a prefabricated lesson and breeze out again, claiming to have taught. Such a facile approach trivializes teaching, and sends the message that learners and learning are unimportant. True professionals would never participate in such a one-way process, for they know that teaching and learning are interactive.

Professional teaching and children's learning. For competent professionals, students' learning is the *sine qua non* of teaching and schooling. They both understand and are discouraged by the nonchalant attitudes that tolerate anything less. Such professionals are deeply concerned by mounting evidence that many of this country's teachers act as educational functionaries, faithfully but mindlessly following prescriptions about what and how to teach. Conducting classes in routine, undemanding ways, far too many teachers give out directions, busywork, and fact-fact-fact lectures in ways that keep students intellectually

passive, if not actually deepening their disregard for learning and schooling.

Professional teachers recognize that such teaching may *appear* harmless, but they know its insidious consequences for children. Because parents are not in the classroom, they cannot see or directly assess the damages. The consequences remain distant, abstract, and easily rationalized. These consequences are imperceptible, rarely erupting in a single dramatic event. But competent professionals know and have great empathy for the effects of mediocre teaching on children.

For many children, partial understandings of school subjects turn into hopeless confusions and obscure abstractions. Struggling to make sense of the fragile, piecemeal understandings they possess, these children fall further behind each month and year. Comparable experience across multiple subjects leads these students to generalize about their abilities; and in growing numbers they assess themselves incapable of making it through school. Many leave, joining the ever larger population of dropouts and unemployed teenagers. Many other students simply persist lethargically, learning little, but accepting it as "just the way school and learning is"—a boring, meaningless waste of time.

Truly competent teachers find it as important to discover ways of helping those who find learning difficult and frustrating as they do helping those more like themselves, who find school learning easy and rewarding. Such competent teaching becomes more important daily, as the student population shifts to include a greater portion of educationally at-risk students. Competent professionals realize that the at-risk status of many students is largely a product of economic, intellectual, and social disadvantages outside the school's purview. Although poverty, neglect, indifference, and ignorance affect learning, true professionals recognize that in-school factors also play a role. School and teacher stereotypes and expectations can narrow student opportunities for learning and displaying competence. Children's at-risk status is created and exacerbated by school and classroom enforcement of limited assumptions about their potential

abilities and strengths. The expressive behaviors of children from minority cultures, children from non-English speaking homes, and children with special learning needs are routinely misinterpreted. They either receive less attention than they rightfully deserve or are assigned to inappropriate classes and denied adequate or appropriate opportunities to learn.

Competent professional teachers recognize the hidden biases of school policies and classroom practices. They do not ignore the problems students bring with them from home or assume that such problems mean inevitable failure. Rather, they recognize that the social context in which learning takes place is a critical dimension over which they have considerable control and that multiple teaching strategies can create opportunities for young people deemed as failures by others. Competent teachers are important to all students, but they are especially critical for these growing numbers of educationally at-risk children.

Today's teachers and teacher educators are aware that neither schools nor universities are now able to develop or reward the professional competence in teaching we envision. Nevertheless, many are eager to participate in changing these unacceptable conditions. Aware that our contemporary problems are rooted more in unresponsive, bureaucratic institutions than in recalcitrant individuals, competent teachers and teacher educators are prepared to participate in the reconstitution of public schooling. But the naive views that keep teaching limited to giving out information and instructions must first be overcome.

Institutions Unfit for Teacher Professionals

The traditions of recruitment, norms of preparation, and conditions of work in schools have severely hindered efforts to improve the quality of teaching. This unfortunate legacy was created by the youthful, transient and large work force needed to staff our schools as the United States attempted to achieve universal education. These norms and traditions contributed to a flat career pattern, roundly condemned as teaching's

"careerlessness," where ambition and accomplishment went unrewarded both in terms of expanded responsibilities and autonomy, and higher salaries. No longer in step with contemporary intellectual and social realities, the impact of this inheritance must be understood and changed if we are to remedy our current educational problems.

During the past century, many young adults taught school temporarily before assuming the responsibilities of their real careers. Women typically chose marriage and full-time housekeeping, although they sometimes returned to teaching. Men usually moved from teaching into higher education, educational management, or other white-collar occupations. Unless combined with a religious or single life, teaching was seldom chosen as lifetime work. The amount and quality of preparation it required did little to encourage the view that one was making a serious commitment to a long-term career. Teaching in the United States evolved as convenient, respectable, and relatively challenging employment for bright and energetic workers who were "passing through," en route to more serious life commitments. It was constructed as a job, rather than a profession; and it accommodated talented short-timers as well as those educated minorities and single women with few other choices for employment.

During the perennial shortages that have existed since the mid-nineteenth century, the nation relied upon the generous subsidy of those whose options were limited by prejudice and civic custom. Demand was handled by granting emergency credentials or inordinately weak credentials. These deceptive remedies created the illusion that all was well. They confused the public by masking the critical distinction between "covering classes" and "competent teaching."

The historical evidence is clear. When teachers grew weary of the excessive work requirements and impossible demands of teaching, most moved on. Those few who sought to make the occupation satisfying to themselves and their students for prolonged periods became increasingly dissatisfied. Naturally, there were exceptions to this pattern, and extraordinary individuals made

outstanding contributions, dedicating themselves to a life of teaching. But the norms for an occupation with more than two million workers cannot be based on what can be accomplished by a small number of saints and heroines.

This evolution of teaching as a non-career went largely unnoticed by American society consumed with developing the massive enterprise of universal schooling. But for those who were attentive, the emerging "revolving door" accommodations were predictable, both for the occupation itself and its preservice and in-service teacher education programs.

The minimal expectations and meager investments that accompany a transient work force gradually became ingrained in the occupation's structure, patterns of preparation, status, and self-image. Independent working arrangements and program flexibility accompanied the intermittent work schedules of individual teachers. Among teachers, a strong reliance on external expertise and directive management followed, and an intellectually dependent "tell-me-what-to-do" attitude became the norm. Only brief investments in teacher education made sense: why would intelligent people pursue long and serious study if they expected to engage in such work for only a year or two? Why would people seek to excel and acquire skills when they would not be expected or permitted to use them in their work? Designed for a youthful, high-turnover job market, teaching and teacher education have never been appropriate for those who would make teaching their career. Until recently, this circumstance did not seem to be a problem for the field overall.

Over the last two decades, however, society has changed in a number of ways that profoundly affected the nation's teaching force. America's college-educated women pursued careers other than homemaking. Employment opportunities for educated women and minorities increased. And the majority of American households came to depend upon more than a single income. For the middle-class families supplying the nation's teachers, two employed adults became the norm.

The consequences of these changes for the teaching force were complex and interactive. Many women who formerly left teaching to marry or rear children retained their jobs. They soon found themselves confronted with the frustrations and negative effects long associated with prolonged work in teaching. With few opportunities for upward mobility, the same situation confronted a growing number of male teachers staying in classrooms. The difficulties encountered by their predecessors, the few who made careers of teaching, were suddenly experienced by a substantial majority of the teaching population.

Many of the most competent left, able to find alternative work. This was especially true for talented women and minorities who found attractive careers in other fields. It was also true for those teachers having marketable knowledge in math and science. Many of the less competitive teachers, however, were effectively stranded.

Growing numbers of young college graduates failed to find teaching positions as the nation's population of children declined in the 1970s and greater numbers of experienced teachers stayed on the job. The teaching force became older and more weary; many remained in body, but not in mind or spirit. They retired on the job. The institutional norms of an earlier era, counter-productive norms that relied heavily on young college graduates with limited occupational choices who would remain for only a few years, no longer fit the aging work force and affected its quality and composition negatively.

Social and demographic trends will aggravate these consequences of earlier recruitment patterns. The size of the occupation itself poses serious difficulties for changing our recruitment strategies. Taking schooling for granted, Americans underestimate the magnitude of human resources necessary for quality universal education. If the schooling enterprise were modest in scope and educated only a portion of the U.S. population, it would not be difficult to staff all classrooms with highly qualified teachers. If 2,000, or even 20,000 new teachers were needed annually, the situation could be managed readily.

But when estimates run as high as 200,000 a year, the challenges associated with recruiting, preparing, and screening this many competent adults become overwhelming, especially when the working conditions and rewards for the work are inadequate or counterproductive.

Current demographic factors will make it especially difficult to obtain an adequate number of competent teachers in the coming decade. The pool of young college graduates from which prospective teachers have been selected will be smaller than at any other time in recent history. Furthermore, this population decline in young adults occurs at the same time that the children of the "baby boomers" are growing in numbers and creating new demands for schooling. Teachers will be needed for these children at the same time that an extremely large number of practicing teachers will retire.

This unusual demographic situation is compounded by a decade of low enrollments in teacher education. The depressed job market for teachers, combined with the public's general awareness of problems in teaching, has discouraged qualified candidates from entering the field. Now engaged in other productive careers, not many will relinquish pay and prestige to become teachers.

Affirmative action achievements of the past decade have also contributed to the situation. The nation's schools can no longer count on a captive market of bright, energetic minorities and women, for they now have attractive alternatives in business, industry, and other professions. Thus, the schools must not only compete in ways they never have before, they must do so at a time when the potential talent pool is decreasing, the demand for new teachers is increasing, and the reputed nature and returns of teachers' work, even given effort and success, are unattractive. For the first time, the desirability of teaching as a career will be tested in an open labor market. Contemporary circumstances and the structure of the occupation together make our response more critical than at any point in our nation's history. If we respond as we have in the past, unprecedented numbers of incompetent teachers will be hired, and contemporary social and

economic circumstances will keep them in the nation's classrooms for many years to come. The level of performance and posture toward professional responsibility of these persons will shape the norms and effects of teaching well into the twenty-first century.

A Differentiated Profession We need to change the career structure of teaching if we expect to improve the quality, engagement, and commitment of the teaching force. To attract, prepare, and retain a truly competent teaching force, intellectually capable adults must have more flexible access to classrooms. And we must counteract the confining role definition for teachers that discourages many effective practitioners from remaining in their classrooms. Improving teaching's attraction and retention powers requires a differentiated professional teaching force able to respond to the opportunities provided by a staged career that would make and reward formal distinctions about responsibilities and degrees of autonomy.

Differentiating the teaching career would be advantageous to individuals, public schools, and professional schools of education. It would make it possible for districts to go beyond limited financial incentives and to challenge and reward commitment. This is essential to encourage teachers to reinvest in their work, and earn rewards while remaining in their classrooms; it will also counterbalance the defection of talented, committed teachers into administration. Some occupational mobility and choice, so conspicuously absent from teaching today, would help to ease many of the frustrations that drive talented teachers from their classrooms.

Differentiated staffing would make it possible for communities to respond to disequilibrium in the supply of and demand for teachers. To meet past shortages, standards were lowered across the board and individuals with spurious preparation were able to achieve full professional status as teachers. The concept of differentiated staffing would permit responsible expansion and contraction of a pool of teachers, while protecting the

integrity of the professional teaching force. A hierarchy of levels of responsibility corresponding to degrees of professional education, experience, and performance evaluations would make it possible to adjust to spot shortages in specific fields, or even more generalized shortages, by adding, subtracting, or shifting personnel resources in a fashion far more rational than is customary today. It would be possible to limit the autonomy of certain teachers who would work under various degrees of supervision, thereby avoiding the traditional practice of bestowing full professional prerogatives on everyone brought into the classroom, regardless of their credentials or demonstrated abilities.

A number of vital institutional goals could be accomplished through differentiated professional staffing. Remediation and the improvement of teaching, for example, would be efficiently handled through the constructive supervision that specialized, differentiated roles in schools would make possible.

Finally, since we understand the reciprocal relationship between teaching and teacher education, differentiating the career would enhance professional schools of education. Just as the knowledge, skills, and sense of professional responsibility developed in teacher education programs affect the behavior of teachers, the working conditions and career structure of teaching influence the standards, structure, and content of teacher education. Improved teacher education must accompany and be accompanied by changes in the role, function, and nature of teaching. Both schools and universities must attack the problems of teacher education and teaching simultaneously.

To create a market for professionally trained teachers with advanced graduate credentials, it is essential to provide expanded career opportunities and rewards in teaching. Otherwise prospective teachers will have few incentives to invest in the demanding professional education essential to competent teaching.

A differentiated profession would be built upon the distinctive contributions of three groups of practitioners,

as outlined in the first part of our report. The *Career Professional Teacher* would be capable of exercising authority at both the classroom level and the school level. The *Professional Teacher* would function with full autonomy, within the limits of role requirements, in the exercise of his or her classroom responsibilities. This person's purview, however, would be limited primarily to the classroom or to a particular group of students. The instructor would practice only under the systematic guidance and supervision of a Career Professional Teacher. Thus, each of these individuals would have an important and distinctive role to play.

Many bright, well-educated adults could be effective teachers without making a career commitment to teaching. They may be undecided about their vocation, or they might prefer to teach children as secondary or tertiary work. They may wish to combine their work in schools with work in other settings, such as business or in the home. We will need the contributions of capable college graduates willing to make a limited investment in teaching. If qualified professional teachers oversee their work with children, our schools could accommodate them.

These novices, or *Instructors*, would not be professional teachers in the sense of committing themselves primarily to the occupation or acquiring a lengthy and professional preparation for a teaching career. Because of their limited perspective, Instructors would have their lessons structured and reviewed by professional teachers. Instructors would not participate formally in setting school policy, evaluating personnel or programs, counseling students and parents, or determining curriculum. Initially, they would be allowed to do only what their limited academic background suggests they could do—interact with others about a subject they know well. Because of their limited knowledge and demonstrated skill, Instructors would have carefully delineated rights, responsibilities, and benefits. They would not have tenure, nor autonomy and obligations afforded fully professional teachers. However, since they would know their subjects well and their instructional

competence could be assured by qualified professional teachers, their full and part-time services would be invaluable to the schools.

Obviously the teaching work force should not consist entirely of individuals who participate on a temporary or limited basis. Capable college graduates must also be encouraged to invest fully in a teaching career. Such Professional Teachers deserve working conditions that support sustained success, and they need alternatives in schools to accommodate their different aspirations.

Unlike Instructors, Professional Teachers would be certified as autonomous practitioners, entitled to exercise their classroom duties without supervision. Not only subject-matter specialists, they would also be specialists in pedagogy. They would understand the core ideas in the subjects they teach, the likely learning problems children encounter at different ages, and the multiple ways by which teachers can overcome these problems. As skilled diagnosticians of children's learning needs, they would understand the physical, social, and intellectual changes that continue to occur as their students mature. They could make appropriate judgments about when to seek outside help, and when they could remediate learning problems themselves. They would be trained in techniques of motivation and classroom management and could evaluate curricular materials.

Professional Teachers would not only be effective instructors in the classroom, they would also be better prepared to serve in a very real sense as *child advocates*. They would be able to ensure that their schools and communities met the educational needs of students. They would understand enough about the role of educational "experts" (i.e., school psychologists social workers, reading specialists) to participate as equals when discussing issues relevant to a child's future. As research has demonstrated, many classroom teachers now defer to these experts in educational decision making, even when it may not be in the child's best interest to do so. When confronted with arcane test results, teachers—like parents—frequently feel disadvantaged in presenting their

own, often more valuable, insights regarding a child's status and needs. The Professional Teacher would speak with legitimate authority on behalf of children. Thus, these practitioners would be more autonomous and responsible in making judgments about students than most teachers are today.

The vast majority of teachers spend their days in settings isolated from other adults or that provide little variety in their responsibilities for instructing children. Many outstanding teachers thrive on this intensively focused role. They are, literally, the backbone of the teaching force. They find their success in instructing children rewarding, and their training, creativity, and commitment is best directed toward their classrooms. Nothing should undermine their effective instruction in the subjects and grade levels for which they have demonstrated competence.

Other teachers, however, would appreciate and benefit from alternatives to their work with children. Interested more broadly in educational policy and improvement, they would like to collaborate with other adults on problems related to school effectiveness. Such teachers ordinarily have to stop working with children if they wish to help advance the field of education. Opportunities for educational leadership must be combined with teaching itself to keep such teachers actively committed to improving their schools.

Career Professional Teachers would possess the knowledge and skill essential to improving the educational effectiveness of other adults in schools. Specialized roles for Career Professional Teachers might include teacher education (guiding the classroom work of Instructors, for example, and providing staff development opportunities for all school-based educators), curriculum improvement, testing and measurement, strengthening home-school relationships, preparing instructional materials, and conducting action research. These Career Professionals are needed to achieve school effectiveness, but current ways of organizing educational work and rewards discourage teachers from assuming such demanding responsibilities. Although expected to

constitute only 20 percent of the teaching force, Career Professionals would play a key role in revitalizing the teaching profession.

Some occupations have used differentiated staffing to make artificial and counterproductive distinctions in the workplace, to fabricate hierarchies in an effort to claim higher status and autonomy. Teaching must be careful to avoid the problems that have plagued other occupations. Large, complex organizations, nevertheless, do become hierarchical: educational institutions have functioned that way for more than a century. The problem lies not with differentiation and hierarchy, but with illegitimate, irrational, and counterproductive organizational distinctions. Rational, differentiated professional staffing in schools that is based upon defensible differences in training, authority, and responsibilities, will make it possible to respond fairly to the complexities of teaching and learning in large, diverse institutions. The question is not whether hierarchies will persist in educational organizations. The question is whether they will be based on defensible, rational distinctions, or on the flight from teaching and traditions of sexism, as they ordinarily are in the schools today.

Differentiated roles in teaching will also require differentiated forms of teacher education. Not all institutions of higher and professional education will perform the same roles. Some will concentrate on providing a coherent undergraduate liberal arts education, the sort of experience necessary to prepare Instructors. Other institutions will provide the academic and clinical graduate education needed by the vast majority of classroom teachers. Still other institutions would also provide the advanced graduate education to prepare qualified teachers for a variety of career leadership roles.

The Pitfalls of Credentialism

Recommending that America elevate teaching's status by raising standards, reforming professional education, and improving career opportunities through differentiated staffing has its potential pitfalls. Because the undertaking

would be costly to individuals and institutions alike, we must do everything possible to anticipate and overcome the unintended, undesirable consequences of our proposals. One danger, for example, lies in the possible abuse of new credentials.

Earlier initiatives in education and other occupations, shaped by a similar dedication to tougher standards and professionalism, have shown that good intentions are not enough to prevent several predictable problems. Imposing new credentials has tended to exclude certain groups, particularly minorities unfamiliar with entrance and certification examinations. Ultimately, performance standards tend to decline to mediocre levels. Practitioners tend to become complacent, unwilling to experiment or entertain risks in serving the public. The knowledge and skills tested and certified by credentials tend to exclude qualities desirable in teaching such as warmth, empathy, reliability, a lack of pretentiousness or defensiveness, an alertness to human subtlety, and an ability to draw people out as well as together.

By misrepresenting what practitioners can actually do, credentialing can ultimately erode the public's trust in the quality of a profession. Credentialing problems can lead individuals to squander money, time, and energy, and can cause institutions to waste resources. Even worse, problems with the integrity of credentials can lead to outright quackery: providing services that actually harm clients.

Schools have a special relationship to the public. Because education is compulsory for all citizens, teaching and teacher education have a unique obligation to avoid the pitfalls of credentialism. Education must resist the temptation to enrich itself as other occupations have done, by offering mediocre performance behind a facade of higher credentials. We can no longer respond as we have in the past, when we tolerated the employment of underqualified teachers while appearing to raise credential standards. We can no longer pretend that raising credential standards for teachers is the same as improving teaching.

Teaching can improve its professional status only by improving its effectiveness—by raising the level of children's achievement and deepening their engagement with learning. Similarly, teacher education's professional status can be improved only by bestowing genuine credentials that reflect the highest standards and the most rigorous preparation possible.

Irresponsible credentialism. There are dangers associated with the professional privilege of granting credentials that teaching and teacher education in particular should avoid. We will examine several forms of deceptive, irresponsible credentialism. Teaching and teacher education must resist the trap of *pseudo-credentialism*: bestowing credentials regardless of demonstrated ability to perform all professional responsibilities autonomously. Pseudo-credentialism does not require professional schools to raise their standards or to improve the quality of the education that they offer. It allows them to continue what they have been doing by awarding a different credential. It does not guarantee that the credential reflects the possession of a specific body of knowledge or skills. The certification and accreditation processes establish the credential's value artificially and politically.

Pseudo-credentialism takes different forms in different professions and their professional schools. In teaching and teacher education, for example, teachers are paid according to the number of credits earned beyond their bachelor's degree, regardless of whether additional education improved their teaching. State-imposed continuing certification requirements routinely benefit teachers and teacher educators financially, with little regard to the substance of the advanced credentials invested in or awarded.

Pseudo-credentialism is a powerful weapon in the arsenal of opportunistic professionalization. As a strategy for increasing an occupation's professional status, pseudo-credentialism's popularity lies in its ability to control or restrict entry into an occupation. Pseudo-credentials can be used to exclude potential practitioners and limit access to an occupation, thereby creating an artificial scarcity, as

medical and law schools have done for most of the twentieth century. But more relevant to teaching and teacher education, they can be used to ease the entry of underqualified practitioners into an occupation during a period of shortage, while appearing to maintain or even raise standards of preparation. Along with professional schools in other fields, schools of education have been guilty of manipulating the value of their credentials for some time.

Professional schools, particularly those responsible for teacher education, can no longer afford to continue the tradition of pseudo-credentialism. Teaching and teacher education must not seek professional status by distorting the value of their credentials, without regard for the quality of the training available or demonstrations of professional competence.

Teacher educators must not simply add on course requirements, or demand a fifth year of training, without rethinking the value of such changes. Nor must they endorse standardized examinations that do not reflect the range of knowledge, skills, and dispositions characteristic of competent professional practice. Teaching and teacher education cannot afford to imitate many of the professionalization strategies that other occupations have employed.

The potential abuses of pseudo-credentialism, however, should not lead us to reject professional education and certification, and replace them with the assumption that those who know something can automatically teach. Opening the entitlement to teach to the open market—one response to disenchantment with the abuse of existing credentials—would not solve the problem of teacher quality. Indeed, *deregulation* would aggravate the learning difficulties of most children.

We should recognize that rejecting professional education in favor of allowing college graduates from the academic disciplines to assume full responsibility for classroom instruction only substitutes one form of pseudo-credentialism for another. Ironically, by allowing college graduates lacking professional education to teach, as

deregulation would permit, we would willingly substitute one form of educational proxy for another.

In neither case is real teaching ability being required, recognized, or developed. In one case the credential consists of doing whatever is necessary to complete a traditional teacher education program (ordinarily maintaining a minimum grade point average and passing specified courses in order to accumulate credits). In the other case, the credential consists of whatever is necessary to earn a bachelor's degree in one of the disciplines (by similarly accumulating course credits and maintaining a specified grade point average). Course grades and the accumulation of credits constitute the coinage of both credentials. Neither case necessarily produces good teachers. Good teaching and the improvement of children's learning is essentially irrelevant to both. Neither approach is likely to help us respond effectively to the situation we face, and neither is acceptable.

From the earlier discussion it should be obvious that competent, responsible teachers must possess far more than subject matter knowledge. Just as there is a role for higher education to play in building maturity and disciplinary knowledge in the arts and sciences, there is a role for professional education to play in strengthening prospective teachers' understanding of responsibility; developing their ability to engage students in academic learning; and cooperatively guiding their eventual induction into the classroom.

In addition to the problems of pseudo-credentialism and deregulation, teacher education must guard against the temptation of the other extreme, *blind credentialism*. We need to be cautious about forcing professionals who have already demonstrated their competence and responsibility to earn additional credentials in order to satisfy well-meaning but dysfunctional certification requirements. Endorsing professional education does not imply that real performance evaluations will not be made, or that the credentials available through the educational programs will be accepted in lieu of on-the-job assessments of teaching ability. The *issue* is how to prepare the pool of

teachers who are to be allowed to be evaluated. The *problem* is how to prepare the pool of teachers who will earn the highest assessments for their instructional effectiveness.

Responsible credentialism. The Holmes Group proposes an alternative to the sort of irresponsible forms of credentialism outlined above. We endorse an approach to professional education and recruitment into teaching that will produce the most trustworthy pool of professional teachers. Professionally educated and certified teachers would possess a strong liberal arts and disciplinary background, a repertoire of imaginative teaching and coaching skills, and a commitment to the responsibility for the learning of all children.

Problems in Undergraduate Liberal Education

Improved teacher education is not possible without the concomitant reform of the nonprofessional components of the undergraduate curriculum for prospective teachers. Teachers should know their subjects thoroughly and have the intellectual qualities of educated, thoughtful, and well-informed individuals. Professional courses of study in education should meet the standards of the core disciplines from which they derive; that is, educational psychology must be sound psychology and courses in the methods of teaching mathematics must embody sound mathematics. When students come to pursue their professional studies in teaching, therefore, they must come already equipped with a sound command of the undergirding discipline. Clearly, teacher education is dependent upon the arts and sciences, consistent with the primary disciplines.

Many of the criticisms levied at high schools by *A Nation at Risk* and other recent reports are equally valid for the university. Both the Scholastic Aptitude Test and Graduate Record Examination scores have declined in the basic aptitude tests and in academic subject examinations. Like public school teachers, university faculty award higher grades than students earn. Most undergraduates, like their high school counterparts, are intellectually docile, indifferent, and disengaged from learning. Like all

teaching positions, faculty positions are becoming less attractive. And, as in the high school, there has been an unjustifiable proliferation of elective courses and major subject areas. In general, the pressures inherent in the laudable goal of universal schooling have led institutions of higher education to compromise their standards in much the same fashion as the high schools.

The specific criticisms in the national reports about higher education tend to confirm The Holmes Group's analysis of the weaknesses in the undergraduate programs at their own institutions: a lack of curricular coherence and an avoidance of a core of enduring and fundamental ideas of the sort that the National Endowment for the Humanities cites in *To Reclaim a Legacy*. Yet the mastery of such a core is perhaps more important for teachers, especially elementary school teachers, than for any other professional group. All professionals use knowledge in their work, but teaching—insofar as it is not simply career counseling and social work—is actually about knowledge.

The reform of undergraduate education toward greater coherence and dedication to the historic tenets of liberal education is thus essential to improving teacher education. Teachers must lead a life of the mind. They must be reflective and thoughtful: persons who seek to understand so they may clarify for others, persons who can go to the heart of the matter.

We must address the failure of university faculty to assume corporate responsibility for the entire undergraduate program, a problem exposed by the American Association of Colleges in *Integrity in the College Curriculum*. The discipline or departmental organization, the source of so much strength in the modern university, also limits faculty attention and leadership related to issues that extend beyond the narrow boundaries of the academic major, issues that are central to a broadly and liberally educated teacher. At best, the contemporary academic major is largely a preparation for graduate study in the field or for entry-level employment. This limited focus does not provide an adequate grounding in the disciplines for professional

teachers who, at all levels, must find and present the most powerful and generative ideas in a way that both preserves the integrity of disciplinary knowledge and leads students to understand the subject.

The traditional course of study in an academic major, in its premature rush to specialization and vocational preparation, often fails to elaborate the structure of the discipline, its origins and goals, and ignores criteria that cause some issues to merit deep study and others to be merely interesting or trivial. These areas, slighted in traditional programs, are of fundamental importance to education in general and to teachers in particular.

The Holmes Group agrees also with the National Institute of Education's report *Involvement in Learning*, which argued that the test of sound academic policy was whether it increased the students' active involvement in genuine learning, especially during the first two years of the baccalaureate. This engagement with learning is essential for teachers to develop a mastery of the discipline at a level that guarantees their authoritative and confident response to the inevitable and legitimate requests they will have from their pupils to "do" or "perform" the discipline, not just talk about it. In addition to content, it is the quality of engagement which characterizes a liberal education.

In sum, it is too easy for critics of current teacher education programs to say that prospective teachers need to take more courses outside of the colleges of education. As James Conant complained, such views "invariably represent a point of view so oversimplified as to be fundamentally invalid." Over two decades ago, his landmark study of teacher education revealed that the subject area courses were tedious and the general-liberal studies were in a state of disarray, even in the most prestigious colleges and universities. Conant's finding on the depth and breadth of the subject area requirements fit the situation today: "Thousands of students each year wander through survey courses with only the shallowest knowledge of the subject;" and "One cannot assume that a holder of a bachelor's degree from an American college has necessarily pursued a recognized subject in depth, or

in a coherent pattern."

But while the higher education community has recognized these problems for a long time, we have failed to develop appropriate solutions. A major concerted effort is essential, therefore, to stimulate effective reform. We must assemble the outstanding faculty scholars to grapple with the issues in ways that lead to redesigned and better taught courses and programs of study that are very different from those generally found in the modern university.

The Holmes Group leadership, however, is aware of the challenge and complexity of reforming undergraduate liberal arts education. The difficulties of shifting the reward structure in the traditional academic disciplines in order to make a coherent undergraduate liberal arts education possible will have to be confronted once again. Lengthy and costly battles have been fought over this goal. The frustrations and disappointments of academic and philanthropic leaders who failed to produce lasting change in institutions of higher education are well known. The power of prevailing incentives for exaggerated specialization, premature vocationalism, and excessive fragmentation within disciplines undermines consensus-building about content. Attracting and retaining talented scholars to teach the courses once consensus is reached is similarly difficult.

Regardless of the problems, it is essential to change the course selection patterns and class content encountered by prospective teachers during their preprofessional studies. Such a reform campaign would not only benefit prospective teachers, but would strengthen the higher education of all college students.

Inadequate Professional Education

Reforming the education of teachers depends upon engaging in the complex work of identifying the knowledge base for competent teaching, and developing the content and strategies whereby it is imparted. Although specialized professional knowledge has been under development for some time—and dramatic strides have been made during the past two decades—an amalgam of intuition, unreflective reactions, and personal

dispositions still seem to ground the right to teach. Improving teaching requires teachers to act on legitimate professional knowledge, skills, and an ethos of responsibility.

To proclaim that high school teachers should have academic majors does nothing to improve teacher education in most research institutions; virtually no prospective secondary teachers now major in education. By tradition, they major in one or more subject fields and take the same disciplinary courses and general-liberal studies required of all students pursuing the baccalaureate degree. These substantial content requirements limit the opportunity of prospective secondary teachers to develop their knowledge and skills in transforming and using subject matter knowledge in teaching. Their pedagogical studies are restricted to a few university courses and a brief period of supervised practice in the schools. The well-documented lack of flexibility in high school instruction, and the preponderance of boring lectures, can be largely attributed to inadequate pedagogical training and screening for secondary teachers. Prospective elementary teachers, in contrast, take a more substantial set of offerings in pedagogy, but do so at the expense of essential knowledge in the subjects they teach. In both circumstances, the content and process of pedagogical study demands analysis and redevelopment.

Basically a "non-program" at present, professional courses are not interrelated or coherent. The curriculum is seldom reviewed for its comprehensiveness, redundancy, or its responsiveness to research and analysis. Advisement is often ineffective, leaving students to wander about, rather than progressing systematically in a cohort through their programs. Rituals and ceremonies that honor the important work of teachers are rare.

Scholarship and empirical research in education has matured, providing a solid base for an intellectually vital program of professional studies. A program of professional studies must integrate at least five components to qualify as a comprehensive plan for teacher preparation.

The first is the study of teaching and schooling as an academic field with its own integrity. The second is knowledge of the pedagogy of subject matter—the capacity to translate personal knowledge into interpersonal knowledge, used for teaching. A related third component is comprised of the skills and understandings implicit in classroom teaching—creating a communal setting where various groups of students can develop and learn. The fourth consists of the dispositions, values and ethical responsibilities that distinguish teaching from the other professions. Finally, all these aspects of professional studies must be integrated into the clinical experience where formal knowledge must be used as a guide to practical action.

Studies of education as a discipline provide a description and explanation of the phenomenon of schooling itself—its development, its purpose, and the micro and macro mechanisms that make schooling possible and sustain it. A sound study of education, whether at the graduate or undergraduate level, would provide a way of understanding schooling in the same way that the study of any discipline illuminates a set of phenomena. In this sense, education is one of the arts and sciences since it applies tested modes of inquiry to a phenomenon of universal scope and significance.

The unique educational matter, not in the domain of any affiliated discipline (namely, the behavioral sciences, history, and philosophy) is curriculum; yet this is one area about which we have little compelling information and theory. Education is the discipline of the disciplines. While the determination of the origins, purpose and mechanisms of schooling are vital, the heart of the matter is the structure of knowledge and what knowledge is of most worth.

Until the last two decades, scholarship in education and the content of the hundreds of university courses in the subject had to rely heavily upon the findings in other disciplines, particularly the behavioral sciences. Collected in non-school settings, this information as transferred to issues of educational practice has been unsatisfying to

everyone. It was unconvincing and provided only ambiguous guidance about educational practice and policy. Within the last twenty years, however, the science of education promised by Dewey, Thorndike, and others at the turn of the century, has become more tangible. The behavioral sciences have been turned on the schools themselves, and not just in laboratory simulations. Studies of life in classrooms now make possible some convincing and counter-intuitive conclusions about schooling and pupil achievement. Ironically, now that the promise of science of education is about to be fulfilled, many current reform recommendations recall an older literature that demands a decrease in the time given to the study of this scholarship.

Current literature demonstrates that well-meaning, and well-educated persons will make a number of predictable pedagogical mistakes that will disproportionately harm at-risk pupils who traditionally do not do well in school, and who may be unlike their teachers in background and temperament. We can expect these well-meaning adults to teach as they have been taught by their own teachers and parents. As novice teachers, they will teach the way young children teach each other—by direct telling and demonstration of the correct information.

There will be a general failure to employ the more indirect but powerful teaching strategies, like maieutic methods, role playing, and social interaction and cooperation strategies. Such strategies require disciplined practice that typically exceeds even that offered by extraordinary teacher education programs. It takes training, for example, to wait more than a few seconds for pupils to answer a question before filling the silence with elaborative comments that disrupt the students' thinking. It takes training to increase the higher order questions a teacher asks; to decrease the preponderance of teacher talk; to provide advanced organizers, plans and clear directions; to give teachers the cognitive resources to make pedagogical decisions and to manage productively the hundreds of distinct interactions they will have with pupils each day.

A major undertaking for research universities committed to strengthening teaching as a profession is the reformation of pedagogical study requirements. Foremost for elementary teachers is the need to restore the primacy of content knowledge and to better unify it with the methods of teaching. This goal reaffirms the complex relationship of teacher education to other academic units on campus and indicates the need for collaboration in revising and renewing both pedagogical studies and the liberal arts curriculum.

While a grounding in subject matter is not sufficient for prospective teachers, neither is the equally important broad view of the subject fields with their internal structure and commonalities with other areas of study. Professional education must develop the capacity to present and reformulate content so as to engage a variety of pupils; increase familiarity with available curricula and strengthen the critical acumen necessary to judge their value for particular settings and goals. Such pedagogical expertise is essential to build the bridge between personal understanding and the capacity to teach. Prospective teachers must also develop the capacity to establish effective tutorial relationships with their students. Students do not approach learning as empty vessels; they more likely present the teacher with initial conceptions that are incomplete, flawed, or otherwise in need of transformation. Knowing the likely universe of such preconceptions for a cohort of students, assessing their learning, interpreting errors, and discerning predominant ways of construing meaning, are all essential for helping students learn.

The common setting for imparting subject matter is the classroom. Instructing learners in groups and managing numbers of students in confined spaces call for yet another set of skills that go well beyond keeping order. An example is orchestrating the economy of the classroom, counting not only time and curriculum materials among its resources, but also the teacher's instructional efforts and those of students. In well-managed settings, they reciprocally support learning.

Creating and sustaining a communal setting respectful of individual differences and group membership, where learning is valued, engagement is nurtured, and interests are encouraged requires more than a set of identifiable skills. The successful transmission of these attitudes and values are more a function of the teacher's dispositions and beliefs that come to imbue the classroom culture.

The development of desirable professional dispositions in prospective teachers is as much of a challenge as the cultivation of valued attitudes in younger students. Didactic instruction is of limited value. More influential is the act of playing out these values in the ordinary interactions of daily classroom life. To successfully enact valued dispositions they must be authentic, internalized by the faculty and teachers alike. Teachers cannot be disinterested, lethargic, and uncaring if they are to cultivate curiosity and engagement in their students. Although dispositions cannot be directly taught, they can be acquired in settings where they are regularly acted out, with opportunities to practice them. The overall design of professional programs must reflect the need for their cultivation.

The academic pedagogical studies available in colleges of education routinely fail to develop such essential professional knowledge, skills, and dispositions in the teachers they prepare. The clinical component of the pedagogical studies program similarly fails to strengthen the professional qualities needed to ensure competent classroom instruction.

Virtually every evaluator of the traditional teacher education program finds that the graduates attribute their success as teachers to their student teaching experience or to their first years in the classroom as teachers. Indeed, the grade the student receives in the student teaching course is one of the few academic predictors of teaching success. For these reasons many reformers believe that an extension of student teaching opportunities into other parts of the teacher education program is worthwhile.

However, there are reasons to be skeptical about widely held claims for the benefits of the traditional clinical experience. Although students value it most highly, as do

their counterparts in all professional preparation programs, the teacher candidate's field experience is neither broad nor deep. Mentor teachers are often selected by school officials with little understanding of the particular learnings to be acquired, and with little appreciation for the professional knowledge of competent teachers and teacher educators. University supervision is infrequent. It is common for the practice experience to be limited to a single school, classroom, and teacher—all of whom are basically unknown to the university faculty and unfamiliar with other aspects of the teacher education program. Rarely does the experience build upon the general principles and theories emphasized in earlier university study. Almost no person fails these courses and almost all earn top marks for their efforts. Yet most student teachers quickly conform to the practices of their supervising teacher and rarely put into practice a novel technique or risk failure. Student teachers succeed because they relinquish the norms of professional colleges of education without a struggle. The typical student teaching experience is not a genuine laboratory experience because the possibilities of failure and risk are minimal. The emphasis is upon imitation of and subservience to the supervising teacher, not upon investigation, reflection, and solving novel problems.

University faculty, working with selected clinical faculty from cooperating schools, are needed to reexamine contemporary pedagogical offerings. Professional programs need to be revised by adding, deleting, or modifying courses to produce an articulate, coherent pedagogical curriculum that has intellectual integrity. Methods and content courses need to be complementary and compatible with one another and develop an ethic of inquiry and professional judgment. Clinical experiences must occur in multiple sites to provide learning opportunities with youngsters of diverse ability, motivation, and cultural background. Most importantly, we must respond to the tensions always associated with constructively relating theory and practice by drawing upon the insights and learning available to teachers in both their academic work and clinical experiences.

Lack of Demonstration Sites

Recognizing the interdependence of teaching and teacher education suggests a promising alternative to traditional sites for preparing prospective teachers. *Professional Development Schools*, the analogue of medical education's teaching hospitals, would bring practicing teachers and administrators together with university faculty in partnerships that improve teaching and learning on the part of their respective students. Such schools would largely overcome many of the problems associated with traditional academic and clinical pedagogical studies programs. They would provide superior opportunities for teachers and administrators to influence the development of their profession, and for university faculty to increase the professional relevance of their work, through (1) mutual deliberation on problems with student learning, and their possible solutions; (2) shared teaching in the university and schools; (3) collaborative research on the problems of educational practice; and (4) cooperative supervision of prospective teachers and administrators.

The concept of Professional Development Schools assumes that improving teaching ultimately depends on providing teachers with opportunities to contribute to the development of knowledge in their profession, to form collegial relationships beyond their immediate working environment, and to grow intellectually as they mature professionally. The idea of such collaborative sites also recognizes that university-based research and instruction in education must have strong roots in the practice of teaching if they are to maintain their intellectual vitality and its credibility with the profession. Professional Development Schools, then, would provide a structured partnership for developing the teaching profession and ultimately improving students' learning.

Because the Professional Development School has a unique training role, many of its staff members would have formal responsibility for teaching prospective professionals. While continuing to practice their profession on a regular basis, this "clinical faculty" would have university appointments and be reimbursed for their contributions to the training program. The clinical

faculty—comprised largely of accomplished elementary and secondary teachers—would have attained the stage of Career Professional Teacher and successfully completed advanced studies in teacher education.

The second purpose for creating exemplary school sites, broader than the first, is the development of professional knowledge and practice. Professional Development Schools would provide an opportunity to test different instructional arrangements, under different types of working conditions. In this way, they would contribute to the ongoing refinement and codification of successful teaching and schooling. While not necessarily valuing innovation for its own sake, those who work in these schools would have to maintain an open-minded and experimental attitude. It is important that they be constantly seeking ways to increase their instructional effectiveness with diverse groups of at-risk youngsters. Experimentation and sustained evaluation would become integral aspects of the ethos of the Professional Development Schools. They would be actual demonstration sites where recent scholarship could be consistently reviewed and selectively incorporated into operating policy and practice. The most innovative professional practices would be developed, demonstrated, and critically evaluated at these sites. By creating "models" of exemplary practice that could be tried out elsewhere, Professional Development Schools could make a major contribution to the development, codification, and implementation of professional knowledge.

Finally, Professional Development Schools would help to strengthen the profession by serving as models of promising and productive structural relations among Instructors, Professional Teachers, Career Professional Teachers, and administrators. Improving these relations, expanding opportunities and responsibilities, would make working conditions in schools rewarding enough to attract talented novices and to retain competent, dedicated teachers. Professional Development Schools would provide an optimally balanced program of study and experience for the neophyte under the tutelage of teacher educators and teachers working in the vanguard of

practice. They would also offer talented persons who enter teaching, who love it and want to improve it, a means of advancing without leaving the classroom, physically or psychologically. Thus the senior teachers (Career Professionals) in a Professional Development School would be rewarded with the opportunity to be engaged in a variety of ways: in teaching, research, teacher education, and policy formation.

A Collective Commitment to Action

With these issues as our focus, the members of The Holmes Group and their institutions are committed to a broad strategy for reform of teacher education. We recognize that powerful forces are working against major reform. One of these forces, ironically, is the dramatic increase in demand for teachers that will occur over the next several years. If states and localities follow past practice in responding to this demand, by offering temporary certification to unqualified teachers and by allowing certified teachers to teach outside their field of competence, then efforts to reform teacher education will be substantially undermined.

Another force working against major reform of teacher education is, unfortunately, the education reform movement itself. A number of recent proposals for education reform have suggested that attracting high quality teachers is a key component of education reform—a principle that we endorse. Reformers have recommended other principles with which we concur: attention to subject matter competence, differentiated career opportunities, clinical experience, and the like. But none of the reform proposals has addressed the central issue in the improvement of teaching—the professional stature of teachers. Until this is addressed, we will continue to attempt educational reform by telling teachers what to do, rather than empowering them to do what is necessary.

Reform advocates have never fully appreciated the fact that the problems of teacher education mirror society's failure to treat teaching as a profession. If the rewards, career patterns, working conditions, and professional responsibilities of teachers indicate a second-class

occupation, then candidates for teaching and teacher education will tend to follow those expectations. Teacher education cannot be improved in isolation from the profession itself. The Holmes Group is committed not just to the improvement of teacher education but to the construction of a genuine profession of teaching.

Furthermore, policy changes recommended by many reform advocates are only the first stage of lasting reform. Past attempts at large-scale reform show that changes imposed from above, without the concurrence and collaboration of those who must implement them, have limited and unpredictable effects. Changes in the structure and content of teacher education depend, over the long term, on strong linkages among policy-makers, scholars, and practitioners. The Holmes Group is committed to carrying the reform of teacher education into the classroom by establishing strong linkages with schools; into the central office and boardroom by working with local school systems; and into the state legislative chamber by working for changes in the policies that shape the teaching profession.

At the same time, we recognize that there will be many mistakes, false starts, and unanticipated problems with our proposed agenda. We also recognize that solutions which work in one setting may require adaptation to work in another setting. We foresee that we will learn much about the strengths and limits of our proposed agenda in the years ahead. Hence, The Holmes Group is committed to exploring a range of alternatives around several common themes and to sharing the wisdom of experience among ourselves and with others. As we become more confident of solutions to the problems of constructing a teaching profession, we commit ourselves as institutions of teacher education to establish accreditation standards that reflect our five major goals.

To Make the Education of Teachers Intellectually Sound

Competent teaching is a compound of three elements: subject matter knowledge, systematic knowledge of teaching, and reflective practical experience. The

established professions have, over time, developed a body of specialized knowledge, codified and transmitted through professional education and clinical practice. Their claim to professional status rests on this. For the occupation of teaching, a defensible claim for such special knowledge has emerged only recently. Efforts to reform the preparation of teachers and the profession of teaching must begin, therefore, with the serious work of articulating the knowledge base of the profession and developing the means by which it can be imparted. The Holmes Group recognizes the central importance of a strong liberal arts education in the preparation of teachers. Of all professions, teaching should be grounded on a strong core of knowledge because teaching is about the development and transmission of knowledge. With this in mind, The Holmes Group commits itself to phase out the undergraduate education major in member institutions and to develop in its place a graduate professional program in teacher education.

At the same time, The Holmes Group agrees with recent criticisms of the lack of coherence and the lack of focus on enduring questions in undergraduate education. The disciplinary and departmental structure of universities is a symptom of limited faculty involvement and leadership in important issues that extend beyond the boundaries of the academic major. This structure presents major problems for the development of broadly educated people, whether they intend to be teachers or not. In addition, the structure does not encourage university faculty in the academic disciplines or intending teachers to explore systematically the special challenges of teaching academic subjects.

Reform of teacher education must be coupled to changes in undergraduate education. The Holmes Group is aware of the complexities this relationship presents. Members of the group will work with the chief academic officers and departmental colleagues in their institutions to develop strong and intellectually defensible courses in the core subjects, and to interest disciplines and departments in linking subject matter knowledge to teaching.

Providing prospective teachers with strong subject matter knowledge does not equip them with the understanding or skill necessary to teach that knowledge to someone else. The Holmes Group recognizes serious problems with the way teacher preparation is currently structured. Prospective high school teachers focus on disciplinary courses and general liberal studies, leaving little room for systematic understanding of how to develop their knowledge and transform it for use by others. Prospective elementary teachers spend substantially more time on pedagogy, but do so at the expense of subject matter knowledge. Members of The Holmes Group commit themselves to a thorough reassessment of the pedagogical curriculum and to the development of a strong, coherent program of professional education in this area.

Clinical experience is the final element of the intellectual foundation of teaching. Despite the fact that clinical experience is almost universally praised by teachers, it presents some of the most serious problems with existing teacher education. The clinical component of teacher education must be integrated more systematically with research on professional practice, with the reconstruction of the pedagogical curriculum, and with the development of the profession. The Holmes Group is committed to developing clinical experience in a number of settings and to focusing clinical experience on the systematic development of practice, not simply on exposing prospective teachers to experienced teachers.

To Recognize Differences in Knowledge, Skill, and Commitment Among Teachers

Improved teacher education must be accompanied by changes in the structure of the profession. Raising standards of admission, increasing educational requirements, and increasing expectations of knowledge and mastery for teachers will encourage competent applicants only if the rewards of teaching and opportunities for professional advancement are commensurate with the educational requirements. Hence, a differentiated structure is a prerequisite for the construction of a profession of teaching.

The Holmes Group commits itself to the development of a differentiated structure at three levels: the Career Professional Teacher, who would be capable of assuming responsibility not only within the classroom but also at the school level; the Professional Teacher, who would be prepared as a fully autonomous professional in the classroom; and the Instructor, who would be prepared to deliver instruction under the supervision of a Career Professional Teacher. The Holmes Group also commits itself to make the changes in graduate education necessary to prepare professional teachers for this differentiated structure and to use its influence to change state and local policy.

To Create Relevant and Defensible Standards of Entry to the Profession of Teaching

The hallmark of a profession is its responsibility for the quality and competence of its members. This responsibility is twofold: responsibility to the members of the profession for the human and financial investments they have made in their preparation must not be devalued; and responsibility to the public at large that the knowledge and skill of the profession are present in its members. The Holmes Group commits itself to develop and administer a series of Professional Teacher Examinations that provide a responsible basis for decisions on entry to the profession. Because of the limitations of standardized testing in predicting the future performance of teachers, The Holmes Group commits itself to require students to demonstrate mastery of important knowledge and skill through multiple evaluations across multiple domains of competence.

Students admitted to teacher education will be required to demonstrate basic mastery of writing and speaking.

Prior to a clinical internship, students will be expected to pass an examination demonstrating their mastery of the subject they will teach, their skill in lesson planning, and their instructional delivery.

During their work in classrooms, prospective teachers will be required to observe and evaluate a variety of

teaching styles, including their own, and to present evidence of analytic skill in this area as part of their professional portfolio for advancement.

These examinations will provide a basis for evaluation not only of prospective teachers but also of the professional schools themselves.

The Holmes Group also recognizes its responsibility to help create a profession representative of the larger society. The most difficult problem in this regard is minority representation. Minority undergraduate enrollments and minority entry to teaching have been declining at the very time when the proportion of minority children in schools has been increasing. Unless this problem is addressed, we may soon have a teacher force composed overwhelmingly of people from majority backgrounds teaching students who are primarily from low-income and minority backgrounds. Holmes Group institutions commit themselves to significantly increasing the number of minorities in their teacher education programs. We will achieve this objective by increased recruitment at the pre-college level; endorsing loan forgiveness programs for minority students entering teaching; developing programs to increase retention of minority students enrolled in teacher education programs; and assuring that evaluations of professional competence minimize the influence of handicapping conditions, poverty, race, and ethnicity on entry to the profession.

To Connect Schools of Education with Schools

The improvement and professionalization of teaching depends ultimately on providing teachers with opportunities to contribute to the development of knowledge in their profession, to form collegial relationships beyond their immediate working environment, and to grow intellectually as they mature professionally. The improvement of teacher education depends on the continuing development of systematic knowledge and reflective practice. These two imperatives lead Holmes Group institutions to commit themselves to establish Professional Development Schools, and working partnerships among university faculty, practicing teachers,

and administrators that are designed around the systematic improvement of practice.

These Professional Development Schools, analogous to teaching hospitals in the medical profession, will bring practicing teachers and administrators together with university faculty in partnerships based on the following principles:

Reciprocity, or mutual exchange and benefit between research and practice;

Experimentation, or willingness to try new forms of practice and structure;

Systematic inquiry, or the requirement that new ideas be subject to careful study and validation; and

Student diversity, or commitment to the development of teaching strategies for a broad range of children with different backgrounds, abilities, and learning styles.

These schools will serve as settings for teaching professionals to test different instructional arrangements, for novice teachers and researchers to work under the guidance of gifted practitioners, for the exchange of professional knowledge between university faculty and practitioners, and for the development of new structures designed around the demand of a new profession.

To Make Schools Better Places for Practicing Teachers to Work and Learn

The construction of a profession, through the improvement of professional education, the development of a differentiated structure for professional opportunity, the creation of standards for entry, and the creation of settings for mutual exchange between research and practice, will have profound effects on the competence and aspirations of new teachers. The existing structure of schools, the current working conditions of teachers, and the current division of authority between administrators and teachers are all seriously out of step with the requirements of the new profession. If the construction of a genuine profession of teaching is to succeed, schools will have to change.

The Holmes Group is committed to changing the structure and working conditions within schools to make them compatible with the requirements of a new profession. Member institutions will work toward this end by developing exemplary models for new divisions of authority among teachers and administrators in Professional Development Schools, and by working within their institutions to make the professional education of administrators compatible with the requirements of the profession of teaching.

The Holmes Group

Appendices

Appendix A

The Holmes Group as an Organization

Background and Structure of the Holmes Group

The Holmes Group grew out of a series of deliberations among education deans on the problems associated with the generally low quality of teacher preparation in the United States. Their initial discussions focused on the lax standards that have been tolerated for many decades. Weak accreditation policies and practices, and the historic disinterest in teacher preparation on the part of major research universities received special attention. Clearly these factors were not independent. The deans and academic leaders in these universities have long recognized the inadequacy of existing standards and review procedures employed by national professional and state government accrediting agencies. But the low priority assigned to teacher education in their own institutions provoked little effort to change the situation.

In the fall of 1983, the Johnson Foundation agreed to sponsor a meeting of 17 deans who were willing to consider alternative ways of involving the major research universities in an effort to enhance the quality of teacher education. Several months later, the foundation hosted a follow-up meeting at its Wingspread Conference Center, this time attended by 23 deans and a number of the chief academic officers from research institutions. These leaders reviewed and approved a two-phase plan calling for the development and implementation of rigorous new standards for teacher education in the leading research universities in each of the fifty states. The goal was also set to have at least one such research university engaged in these endeavors for every twenty-five thousand teachers across the United States. A proposal, developed and submitted for funding in the ensuing months, was

reviewed positively by a number of granting agencies. Financial support for the first phase of the plan was eventually provided by the Carnegie Corporation of New York, the Ford Foundation, the Johnson Foundation, the New York Times Foundation, and the U. S. Department of Education.

Efforts to develop new standards of quality began in the fall of 1984 and continued over the next eighteen months. Many meetings were held and numerous guidelines were drafted, reviewed, criticized, and revised. The sessions were often intense. None of the organizing deans lacked opportunity for input, although none were able to have things just as they preferred. A range of views was encouraged, and principled arguments received serious attention. Selected consultants assisted with special expertise when the problems were particularly complex or controversial. The process was demanding, as the participants increasingly realized the serious nature of the task.

A first attempt at The Holmes Group report was drafted and reviewed in the spring of 1985. Substantial criticism led to major revision, with a second draft receiving almost unanimous approval at the June Wingspread meeting. At this time, it was decided to defer recommendations on special education, bilingual education, vocational education, and early childhood education until more extended consideration of the particular issues associated with those fields was undertaken. Meetings with specialists from these areas were arranged for further study.

It was also decided at this time that further review of the issues continuing to concern the several dissenting members of the group should be undertaken, since the intent was to achieve consensus if at all possible. Thus, additional time and effort was given across the summer to further understanding and problem solving in the hope that full support would be obtained. But another critical issue surfaced. If member institutions adopted the new approaches being recommended by The Holmes Group, would they necessarily have to move away from their present teacher education practices? Could institutions

continue "business as usual" for the most part, while possibly experimenting with some of the ideas proposed as worthy reforms? Or, stated yet another way—could institutions stay in The Holmes Group if they remained unconvinced of the value added by the proposed reforms? The questions were important ones, and they required further consideration and debate.

The steering committee posed this and remaining questions for decision by the full group in the fall of 1985. Meeting in Washington in November, so that one combined session could be held with the academic vice-presidents of the NASULGC institutions, the organizing deans made The Holmes Group official.

Articles of incorporation were signed, and a combined national-regional organizational structure was put in place. In this plan, the United States was divided into five geographical regions, with each region headed by a regional coordinator who would represent the national office in their respective regions. The regional plan was designed to increase efficiency, involvement, and exchange among school and university faculty and administrators from those participating across the regions. The regional coordinators would facilitate planning, implementation, and study among member institutions.

Each regional coordinator would serve on The Holmes Group's National Coordinating Committee, along with the president and vice-president of the Board of Directors. The National Coordinating Committee would be responsible for planning and documenting implementation activities, establishing ad hoc committees for specialized tasks, planning general membership meetings and conferences, and managing funding for the regional and national offices.

Each member of the National Coordinating Committee would sit on the Board of Directors of The Holmes Group. The Board would act as both a decision-making body and a research/study group. The chairpersons and vice-chairpersons of each standing committee would also be members of the Board, which would be responsible for recommending policy for the organization and guiding the

general activities of the standing committees.

Presently, the structure includes the following four standing committees: Curriculum Development; State Planning and Policy; Testing and Evaluation; and Membership. Each standing committee would have participating members from the various regions. Bylaws describing the purpose, membership, and organizational structure of The Holmes Group have been drafted, and will be made available to charter members for examination prior to The Holmes Group's first official meeting where they will be revised as needed, and adopted.

The Character and Membership of The Holmes Group

The November gathering of all organizing members of The Holmes Group again established its character as a reform-minded body. The status quo in teacher education could no longer be accepted. After considerable discussion, they affirmed again that undergraduate students must have a strong general/liberal education, and they must major in academic subjects rather than education. And before being certified to practice with the autonomy professional teachers require, they needed to demonstrate clear mastery of the school subjects they would teach—implying the equivalent of a minor. Further, baccalaureate graduates would not be recommended for certification as teachers without a professional master's degree in education; and in particular, one that included a year of rigorous academic and clinical study, as well as a year's internship under the tutelage of Career Professional Teachers. Most of the assembled leaders assumed that these stringent requirements would necessitate more than the four years of preparation ordinarily required of prospective teachers.

The persistent problems associated with the "more than four years" issue would be handled by the accommodation of *Instructors*, who would be permitted to teach under the supervision of Career Professional Teachers for a limited period—providing they had

acquired a sound liberal education, a strong undergraduate major or minor in the subjects they would teach (or its equivalent), and the basics of pedagogy. This modified reform plan had the benefit of not preventing strong baccalaureate graduates from having the opportunity to instruct children; but at the same time, it promised that their movement toward becoming a professional teacher—with all the rigorous study and evaluation that implied—would be assured.

The November discussion and a subsequent reconsideration by the Steering Committee in January and February was clear: Holmes Group universities would give primary emphasis to the preparation of Professional Teachers and Career Professional Teachers. And they could prepare talented Instructors if they chose, so long as the distinctions in training and responsibility between Professional Teachers and Instructors remained clear. But the central thrust of The Holmes Group would be furthering the profession of teaching through training and research—and toward this end, its member institutions would subscribe to the agenda and action commitments described in this report.

Thus, members of The Holmes Group would not only emphasize the preparation of professional teachers, but they would also work with one another and with affiliated institutions to provide leadership in improving teaching, schooling, and teacher education as here described. Those supporting quite different reform agendas, or those taking major issue with the primary goals and action commitments of The Holmes Group, would be encouraged to pursue their directions through other organizations supporting their own unique predilections.

Presently, The Holmes Group is establishing its charter membership and furthering its implementation plans. In keeping with the view that a focused effort among a reasonable number of research universities will increase the chance of successful reform, invitations for charter membership in The Holmes Group have been issued jointly to the chief academic officer and dean of education at 123 institutions. At least one leading public

university in each state has been invited, and at least one institution for each 25,000 teachers in a region has been asked to join.

Institutions belonging to the American Association of Universities have been invited to become charter members of The Holmes Group, as have other institutions identified in reputational studies for the excellence of their research and development in education. Other factors taken into account include whether or not the institution offers a doctoral program in education, the past record of investment in research and development activity on the part of the institution as a whole, and the percentage of minority enrollment at the institution.

To become a charter member of The Holmes Group, the chief academic officer and the education dean at the institution must support The Holmes Group's agenda. And they must describe their general plans for encouraging development and implementation of the reform efforts at their institution. Institutional commitment to achieving Holmes Group goals would be demonstrated by the following:

active efforts to implement the reform agenda;

ongoing related research and development activities;

systematic documentation of implementation processes and outcomes;

conscious networking and shared work across institutional boundaries (within the university, between the university, elementary and secondary schools, between the university and the state department of education, and between the university and other professional institutions and organizations);

provision of adequate institutional support for the effort;

changing policies regarding the entry requirements for professional teachers, so that a quality graduate professional degree is required; and

payment of initial membership fee.

Once institutions have met membership requirements, continued participation in The Holmes Group will include an annual progress report, participation in the regional and national projects and activities of The Holmes Group, and payment of annual membership dues. Charter members may cease participation at any time simply by failing to submit their annual report and dues.

It is the intention of The Holmes Group leadership that just as the development of a national test for professional teachers will provide a "quality check" for individual teachers, membership and participation in The Holmes Group eventually will serve as a quality check for research universities and their graduate professional schools or colleges of education. Toward that end, once charter membership has been established and pilot programs for implementation of The Holmes Group reform effort are under way, the group's membership committee will accept applications for possible selection and participation from the deans and academic officers of other institutions wishing to affiliate with the group. It is anticipated that application for Holmes Group membership will be open to other research-intensive institutions within a three- to five-year period.

Appendix B

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Appendix E

Working Drafts of Goals for The Holmes Group Standards

General Goals

1. To change the preparation patterns and occupational structures of teaching so that highly competent people see it as a worthy investment *either* for a brief period of national service or for the long-term as a professional career.

2. To change the entrance standards for teaching so that only college graduates with established records of strong academic ability and successful records of apprenticeship with selected teachers and professors are allowed to teach in our schools.

3. To change the selection process for teaching so that talented college graduates with very modest preparation in education can work for one to five years as instructors; i.e., provided they have sound technical training in the basics on pedagogy, and quality guidance and oversight from professional teachers throughout the school year.

(NOTE: Such an approach could be modeled after our nation's already successful Peace Corps and ROTC programs.)

4. To change the selection process and role expectations for those who would pursue teaching as a career so that only those with outstanding qualifications would fill the ranks of professional career teachers; i.e., those persons willing and able to do the following:

successfully pursue an in-depth course of study for professional preparation;

pass rigorous examinations that evidence mastery of the required knowledge and skill;

demonstrate four consecutive years of teaching that is evaluated regularly and judged consistently to be of truly outstanding quality and commitment; and

assume responsibility for helping schools be more effective through professional work with adults as well as with children.

5. To then change the reward structure for professional career teachers so that the extrinsic, as well as the intrinsic, returns for the work are comparable to that of other respected professions.

6. To change the working relationships, roles, and responsibilities within and between schools and universities so that their collaborative endeavors can assure the public of well-educated teachers for America's children.

Specific Goals

The Institutional Environment for Teacher Education

1. *The university honors its commitment to the nation's elementary and secondary schools through multiple investments in teachers and teaching.*

The commitment on the part of the institution of higher education to improved effectiveness in the "lower schools" is made visible in many ways. Included among these is support for recognizing excellence in teaching, both at the university and in the schools; scholarships for helping needy talented students and assuring cultural diversity among those pursuing teaching careers; the design and conduct of serious research and development aimed at the improvement of teaching and learning in the nation's schools; and, multiple arrangements enabling teachers to participate readily in the continued learning opportunities available through the university.

2. *The university works with selected school districts to create exemplary school sites for student and faculty learning about teaching excellence.*

Referred to here as *Professional Development Schools*, such sites are needed if prospective and practicing professionals are to experience excellence in teaching and schooling. Here the contemporary problems associated with the teaching workplace and narrowly conceived teacher roles are remedied. Instead, working conditions are created that allow for the demonstration and evaluation of the very best in teaching practice. Unlike the laboratory schools of old, these are "real world" schools and as often as possible include pupils from disadvantaged homes. Cooperatively established and maintained with selected school districts, such sites become integral parts of the university's "learning community" in teacher education. A significant portion of the initial and continuing education of professional teaching personnel takes place here since these sites provide an appropriate environment for clinical instruction and professional socialization of teaching candidates and interns.

3. *The university fosters an interdisciplinary climate in teacher education that reflects the importance of disciplinary diversity, depth, and relatedness to teaching.*

Research-intensive universities employ faculty whose academic preparation assures disciplinary strength in the study of educational phenomena. In addition, they employ a set of teacher education faculty that includes persons with a range of relevant disciplinary expertise, cultural background, and subject matter specialization necesssary to understand and improve the highly complex areas of teaching and teacher education. Overspecialization that inevitably leads to program fragmentation and overgeneralization that tends to encourage superficial study are consciously avoided. Instead, there is a valuing of collaboration among faculty with different disciplinary expertise that encourages coherent programs of professional preparation.

4. *The university expects an ethos of inquiry to permeate its teacher education programs at the university.*

The faculty and students at research-intensive universities are encouraged and supported for their propensity to question, to analyze, and to share emerging insights with others. The institution thus provides its teacher education faculty and students with the time, support, and high expectations required for excellence in scholarly inquiry and productivity. Systematic study of phenomena relating to formal education is commonplace, as is the regular exchange of new understandings with other professionals seeking to advance the art and science of teaching.

5. *The university creates significant opportunities for teacher education students to develop collegial and professional norms.*

A sense of community among the students pursuing careers in teaching is accorded through reasonably sized cohorts that enter and pursue coordinated programs of study. These classes have faculty mentors and advisors who remain with them throughout their initial preparation, helping develop personal and professional commitments to the occupation. Such advisors or mentors also facilitate program oversight and attention to the formal occasions designed to celebrate excellence in professional study and practice.

6. *The university assures equitable rights and responsibilities to the academic unit accountable for teacher education.*

The oversight and governance provisions for teacher education within a college, school, or department are comparable in concept and implementation to those of other post-baccalaureate professional schools. This assumes that the teacher education faculty, as well as the characteristics and qualities of the training program itself, undergo regular critical review by academic and clinical faculty from peer institutions. The process and results of these evaluations are made public and shared widely.

7. *The university supports regular improvement of teacher education and participation in a national*

consortium for ongoing research, development, and program improvement.

Making the suggested reforms proposed here a reality calls for joint planning, shared expertise, and collaborative inquiry among the participants at research-intensive institutions, and among the collective set of such institutions across the country. To this end, intra- and inter-institutional working groups collaborate in the development of the following: (a) one or more experimental programs for career professionals; (b) curriculum materials, including a case literature to illustrate and illuminate principles of good teaching; (c) a set of examinations and assessment procedures used to evaluate candidates as they move through the stages of career development; (d) a set of inquiries related to teaching and teacher education which could be replicated across the various states and regions of the country; and (e) procedures for gathering appropriate demographic information related to teaching and formal education.

Faculty in Teacher Education

1. *The faculty responsible for preparing teachers are themselves competent and committed teachers.*

The teacher education faculty refers here to both university-based faculty and school-based faculty. Allowing for notable exceptions, the teaching practices of these faculty emulate sound principles of pedagogy. They are evaluated by peers at least every two years for the presence of such qualities and this evaluation affects decisions regarding salary, promotion, and professional development. In addition, these faculty provide most of the formal instruction and clinical supervision required in the professional studies component of the program. Others, such as graduate students and part-time instructors, who teach in the program are only permitted to do so after a successful internship with a member of the professional faculty, and only when regularly supervised and evaluated for their teaching performance.

2. *The faculty responsible for educating teachers include both university-based and school-based faculty.*

Practicing school teachers are selected as clinical faculty on the basis of an exemplary record of teaching practice and attainment of professional career status in teacher education. Ordinarily, part of the professional assignment for clinical faculty is given to teaching pupils in school, while the remainder is given to work with academic faculty and students in teacher education. The school-based faculty would typically be referred to as clinical faculty, while the university faculty would be referred to as academic faculty. The clinical faculty would have special university appointments and be reimbursed for their professional contribution to the training program.

3. *The academic faculty responsible for teacher education contribute regularly to better knowledge and understanding of teaching and schooling.*

The scholarly productivity of the academic faculty in teacher education contributes to the codification of effective practice and to better understanding of aspects of education that have promise for improving teaching and learning in schools. Academic faculty members' scholarship is evaluated by peers in education and in disciplines associated with their scholarship. The evaluation affects departmental decisions regarding salary, promotion, and professional development.

4. *The teacher education faculty who demonstrate competence as strong teacher-scholars are recognized for this unique and important combination of abilities.*

To be outstanding in both professional teaching and scholarly productivity is neither easy nor common. Scholarship requires contemplative idea exchange, disciplined study, and reflective writing for an abstract audience. Teaching requires interactive people-exchange, thoughtful lessons, and sharing understandings directly with concrete groups of learners. A combination of talent in both areas is worthy of recognition. Thus, the designation "Fellow in Teacher Education" is created to celebrate excellence in scholarship and teaching among teacher education faculty nationally and the status of

'Fellow' would be recommended for a majority of the teacher education faculty in research-intensive universities. Candidates for fellowship status are full-time faculty who submit evidence to a national board attesting to their ability to meet established criteria. A Committee of Review consisting of leading educators (yet to be established) judges which of the applicants merit the status of Fellow.

Students in Teacher Education

1. *The students matriculating through the various phases of study required for career professionals are academically talented and committed to teaching.*

Students recruited for teacher education programs possess superior intellectual talent and appear capable of exerting educational leadership in their schools and communities. They are committed to continued learning and teacher accountability for deep understanding and knowledge of their pupils, subject specializations, profession, and society. Students admitted to teacher education candidacy evidence proficiency in oral and written forms of communication, with those who fail tests in either area accepted only provisionally until they remedy the deficiency. Students who rank in the lowest quartile of the college population nationally are denied admission into teacher education programs for career professionals.

2. *The student groups recruited and accepted into teacher education reflect our nation's obligation to a multicultural society.*

The preparation of minority students as career teachers is an important commitment, especially as the population of school children in the United States becomes increasingly diverse both ethnically and racially. Recruitment and retention programs are established to help meet the need for teachers who represent diversity in racial and ethnic background; specifically, the goal is to significantly increase the percentage of minority students in teacher education each year for the next ten years.

3. *Students evidence mastery of requisite content knowledge through written examination at various stages of their professional career development.*

At three points—prior to status as an intern, novice, and career teacher—students must pass required components of a Professional Teacher Examination (PTE). Developed by faculty from institutions participating in The Holmes Group consortium (liberal arts, subject area specialists, and professional educators), in cooperation with a major testing firm and practicing professionals, this examination measures achievement of knowledge and skills emphasized in the preparation program.

4. *Students, as judged by professionals, evidence appropriate ethical commitments and teaching capabilities prior to successful completion of their internship.*

During the induction year, students are required to successfully complete a half-time teaching internship. Concomitantly, they continue their academic study and work towards completion of the master's degree in teaching. As a necessary part of successful master's study in teaching, the intern teachers must be judged by the academic and clinical faculty as exemplifying both the qualities and ethical character befitting a career teacher, and the teaching performance appropriate for a novice teacher.

Curriculum in Teacher Education

1. *The curriculum for prospective career teachers does not permit a major in education during the baccalaureate years—instead, undergraduates pursue more serious general/liberal study and a standard academic subject normally taught in schools.*

Three major components in general-liberal study for prospective career teachers are recommended. These include studies of basic cultural knowledge, knowledge regarding knowledge itself, and knowledge about people. Studies of cultural knowledge include not only social, linguistic, and literary conventions, but the political, historical, scientific, and technical areas that foster "cultural literacy." Career teachers would be among the

more culturally literate members of society and, as such, have sufficient background knowledge to comprehend the newspapers, magazines, and books addressed to the most literate segment of our nation's population. Career teachers would also be articulate about the sources of knowledge, how it changes over time, the multiple views that abound within disciplines and how knowledge is evaluated and tested. They would distinguish between findings and explanations for findings, and possess the capacity for critical thinking and self-directed learning. Career teachers also acquire knowledge and experience important for professionals who work with people in complex social settings. Such knowledge would enable them to understand how social organizations function and how they influence people. They would come to describe and analyze issues of professional ethics, and the challenges and opportunities present in a society which has within it many groups that vary in culture and ethnic background. Finally, the prospective career teacher's major in an academic subject would increase understanding and appreciation for subject matter depth and mastery. The major could include study of the history of the subject, competing theories in the field, its epistemology and primary modes of inquiry.

2. *The curriculum for prospective career teachers requires a master's degree in education and a successful year of well-supervised internship.*

In their pedagogical study, prospective career teachers acquire special knowledge enabling them to think with depth and flexibility about the enduring problems encountered in teaching. Such problems concern (1) our society's multiple, often conflicting expectations for schools and teachers; (2) the challenges of teaching diverse individuals in group contexts; (3) the need to select appropriate content in the face of multiple goals, changing knowledge, and finite instructional time; (4) the complexity of motivating students to learn while evaluating their progress; and (5) the responsibility of sustaining professional growth and commitment over the course of a career. Beyond knowledge of such problems and how they are illuminated by theory, students also

develop the ability to identify conceptual principles of pedagogy and illustrations of their operation in actual practice. Eventually, students develop the ability to make their own situationally appropriate decisions and take action in regard to such problems—and to study their consequences. Supervised by clinical faculty, interns teach children half of their time, and participate in teaching clinics, engage in action research, and study curriculum. The intent is to prepare teachers who can learn from teaching, not merely survive it.

3. *The curriculum for elementary career teachers would require study in multiple areas of concentration (each equivalent to a minor) in the subject fields for which teachers assume general teaching authority and responsibility.*

One or two courses in a subject (such as mathematics or science) are no longer judged adequate for the autonomy and responsibility expected of career teachers. Thus, by methodically combining baccalaureate and post-baccalaureate studies, elementary career teachers would successfully complete area studies in each of the five basic fields taught in elementary schools: language and literature, mathematics, science, social science, and the arts. The exact nature of these "area concentrations" is yet to be spelled out, but it is envisioned that each will be roughly equivalent in time commitment to a minor field of study. The student's undergraduate major, naturally, would take the place of one of the required concentrations.

4. *The curriculum for secondary career teachers would include significant graduate study in their major teaching field and area concentrations in all other subjects they would teach.*

During post-baccalaureate study and prior to being recommended for career teacher status, secondary teachers would be required to successfully complete the equivalent of an advanced specialist degree. At a minimum, such work would comprise at least one-third graduate study in the area of the teacher's major. Secondary teachers would also successfully complete a

cognate area of study equivalent to a minor, but would be encouraged to continue work in this second area until it reaches the equivalent of a second major.

5. *The curriculum for all prospective career teachers would include substantial knowledge and skill regarding appropriate policy and practice in teaching students with special needs—advanced graduate study would be required for career professional roles in special education.*

All career teachers should be qualified to effectively teach students with special needs in regular classrooms. Those who would specialize in the teaching of special populations would be expected to obtain *additional* knowledge and understanding, however. Special education consultants or teachers of special populations (e.g., children with learning disabilities, bilingual, gifted, or emotionally impaired) would need to obtain the added competence as part of advanced graduate work. Thus, teachers would qualify for autonomous work with special populations only after achieving career teacher status and advanced specialized study in areas relevant to the education of such populations.

6. *The curriculum required for teacher attainment of career professional status requires advanced study appropriate for specialized work in education with other adult professionals.*

Up to now, outstanding teachers had to leave teaching if they wished to participate more extensively in the work of professional education. Now, professional career teachers build on their strong knowledge and competence in teaching youngsters and combine it with additional knowledge pertinent to this expanded educational role. Thus, advanced study to prepare career teachers as specialists in (1) curriculum development, (2) research and evaluation, (3) teacher education, (4) work with special populations, (5) school policy and management, or (6) particular subject fields, would be made available by research-intensive universities—as would assistance in working with schools to create roles for teachers that *combine outstanding teaching of children with outstanding work with adults in education.* Successful

completion of such advanced study would carry recognition as a Professional Career Teacher, and could lead to a second advanced degree (e.g., an educational specialist degree or the doctorate in education).